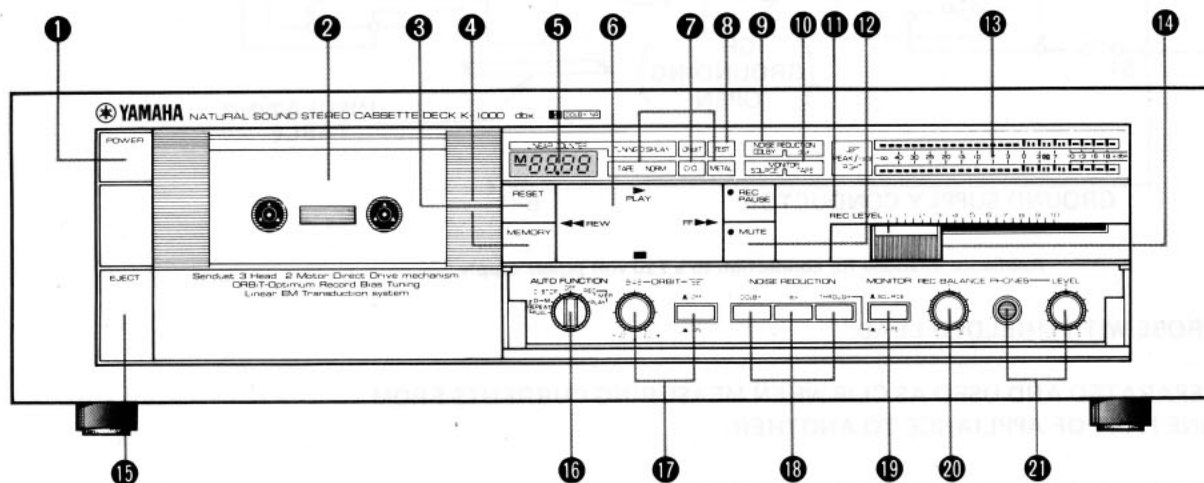


# STEREO CASSETTE DECK

# K-1000

# SERVICE MANUAL

## FRONT PANEL



- |                                 |                                      |
|---------------------------------|--------------------------------------|
| ① POWER SWITCH                  | ⑫ REC MUTE BUTTON                    |
| ② CASSETTE TAPE HOLDER          | ⑬ PEAK LEVEL METER                   |
| ③ RESET BUTTON                  | ⑭ REC LEVEL CONTROL                  |
| ④ MEMORY BUTTON                 | ⑮ EJECT BUTTON                       |
| ⑤ TAPE COUNTER/TUNING DISPLAY   | ⑯ AUTO FUNCTION SWITCH               |
| ⑥ TAPE TRANSPORT CONTROL BUTTON | ⑰ BIAS ADJUSTMENT KNOB/ORBIT         |
| ⑦ AUTO TAPE SELECTOR INDICATOR  | ⑱ NOISE REDUCTION BUTTONS            |
| ⑧ TEST INDICATOR                | ⑲ TAPE MONITOR BUTTON                |
| ⑨ NOISE REDUCTION INDICATOR     | ⑳ REC BALANCE KNOB                   |
| ⑩ TAPE MONITOR INDICATOR        | ㉑ HEADPHONE JACK/PHONES LEVEL VOLUME |
| ⑪ REC/PAUSE BUTTON              |                                      |

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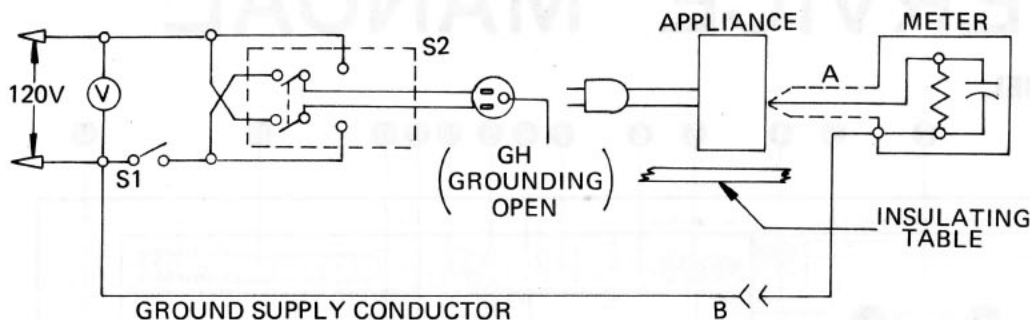
## TO SERVICE PERSONNEL

(Prepared in accordance with UL Standard 1270)

Before service of this appliance by you, please carefully read this service manual.

Please make Leakage-current or Resistance measurements by suitable meter to determine that exposed parts are acceptably insulated from the supply circuit before returning the appliance to the customer.

### LEAKAGE CURRENT MEASUREMENT CIRCUITS



Appliance intended for connection to a 120 volt power supply.

- A PROBE WITH SHIELDED LEAD.
- B SEPARATED AND USED AS CLIP WHEN MEASURING CURRENTS FROM ONE PART OF APPLIANCE TO ANOTHER.

Confirm that the leakage current is not be more than 0.5mA

## SPECIFICATIONS

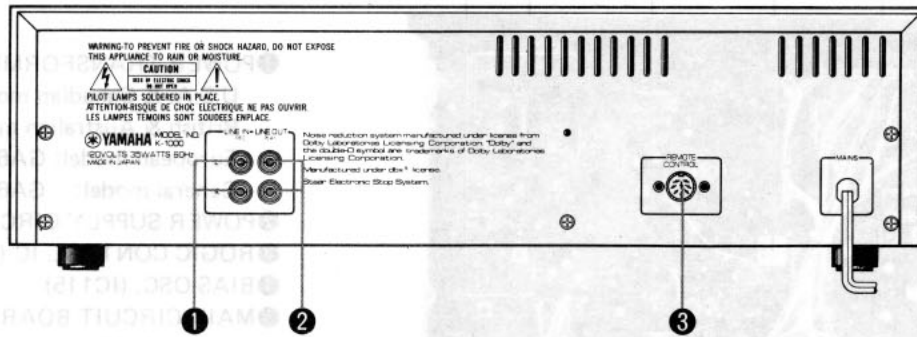
Track Configuration	4-track 2 channel Stereo Cassette Deck
Transport Controls	5-key feather touch full logic control
<b>MECHANICAL SECTION</b>	
Tape Speed	4.8 cm/sec
Wow & Flutter	less than 0.08% W. Peak less than 0.02% W.RMS
Rapid Transport (F.FWD/REW)	Within 75 seconds (for C-60 cassette)
Motor	1 Pulse Servo Brush-less DD motor (Capstan) 1 Flat Torque DC motor (Reel)
Mechanism	2-motor, 2-solenoid mechanism
<b>HEAD SECTION</b>	
Recording/Playback Head	Combination, Low-Impedance Sendust 2 Laminate Core
Erase Head	Double Gap Sendust Clevite
<b>AMPLIFIER SECTION</b>	
REC/PB Frequency Response	
Normal tape (-20dB)	20 to 18kHz ±6dB 25 to 17kHz ±3dB
Chrome tape (-20dB)	20 to 19kHz ±6dB 25 to 18kHz ±3dB
Metal tape (-20dB)	20 to 21kHz ±6dB 25 to 20kHz ±3dB

Input Sensitivity/Impedance	LINE: 50mV/30kΩ
Maximum allowable input	LINE: 6V
Output Level/Impedance	LINE: 500mV/30kΩ PHONES: 170mV/8Ω
<b>Signal-to-Noise Ratio</b>	
THROUGH	more than 59dB
DOLBY	more than 68dB
dbx	more than 105dB
Harmonic Distortion	less than 0.8%
<b>GENERAL</b>	
<b>Power Supplies</b>	
U.S. & Canadian Models	120V 60Hz
European Model	220V 50Hz
British & Australian Models	240V 50Hz
General Model	110/120/220/240V 50/60Hz
Power Consumption	35W
Dimensions (W x H x D)	435 x 122.5 x 346 (17-1/8x4-7/8x13-5/8")
Weight	8.0 kg (17.6 lbs)

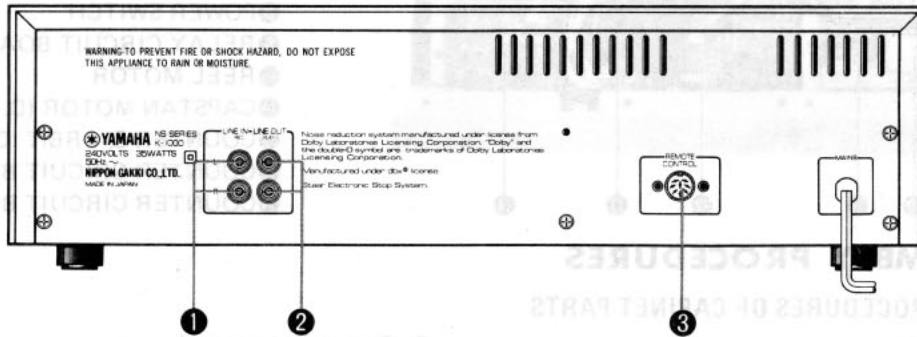
Specifications subject to change without notice.

## REAR PANEL

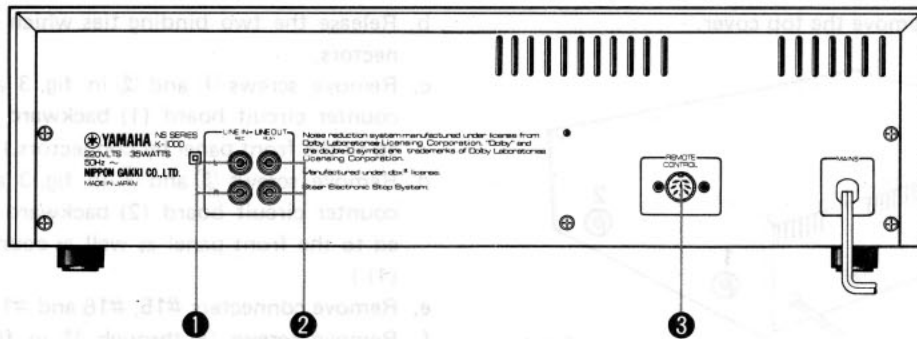
### U.S.A. & Canadian models



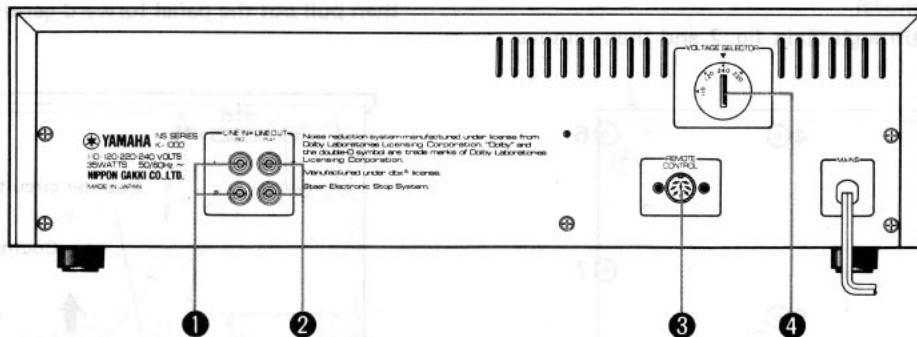
### British & Australian models



### European model



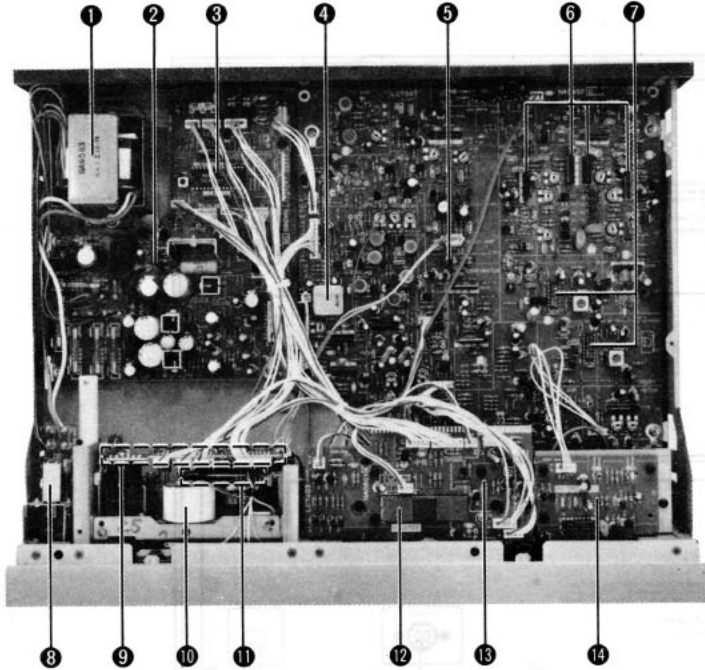
### General model



- ① LINE INPUT JACKS
- ② LINE OUTPUT JACKS

- ③ REMOTE CONTROL TERMINAL
- ④ VOLTAGE SELECTOR

## INTERNAL VIEW



- ① POWER TRANSFORMER  
U.S.A. & Canadian models: GA65850  
British & Australian models: GA65860  
European model: GA65870  
General model: GA65840
- ② POWER SUPPLY CIRCUIT BOARD (1)
- ③ LOGIC CONTROL IC (IC501)
- ④ BIAS OSC. (IC115)
- ⑤ MAIN CIRCUIT BOARD (1)
- ⑥ dbx IC (IC107, IC108, IC109, IC110)
- ⑦ DOLBY IC (IC105, IC107)
- ⑧ POWER SWITCH
- ⑨ RELAY CIRCUIT BOARD
- ⑩ REEL MOTOR
- ⑪ CAPSTAN MOTOR (D.D Motor)
- ⑫ COUNTER & ORBi IC (IC601)
- ⑬ COUNTER CIRCUIT BOARD (1)
- ⑭ COUNTER CIRCUIT BOARD (2)

## DISASSEMBLY PROCEDURES

### DISASSEMBLY PROCEDURES OF CABINET PARTS

#### 1. Top cover removal

Remove screws ① and ② of both left and right sides in fig. 1, and then remove the top cover.

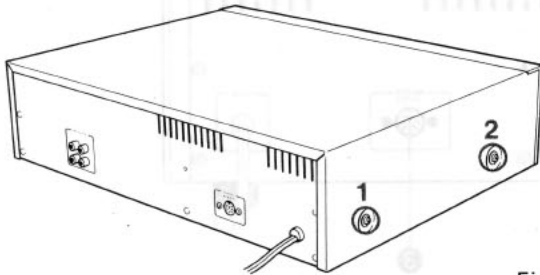


Fig. 1

#### 2. Bottom cover removal

Remove screws ① through ⑧ in fig. 2 and then remove the bottom cover.

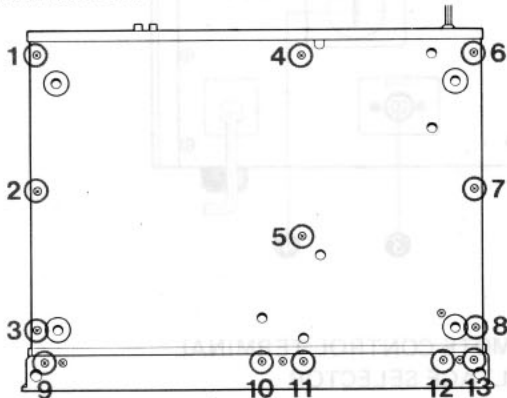


Fig. 2

#### 3. Front panel removal

- a. Remove the top cover.
- b. Release the two binding ties which secure each connectors.
- c. Remove screws ① and ② in fig. 3 and pull out the counter circuit board (1) backward gently (connected to the front panel by connectors.)
- d. Remove screws ③ and ④ in fig. 3 and pull out the counter circuit board (2) backward gently (connected to the front panel as well as counter circuit board (1).)
- e. Remove connectors #15, #16 and #17.
- f. Remove screws ⑨ through ⑬ in fig. 2 and screws ⑤ through ⑨ (yellow screws only) in fig. 3, and then pull out the panel forward gently.

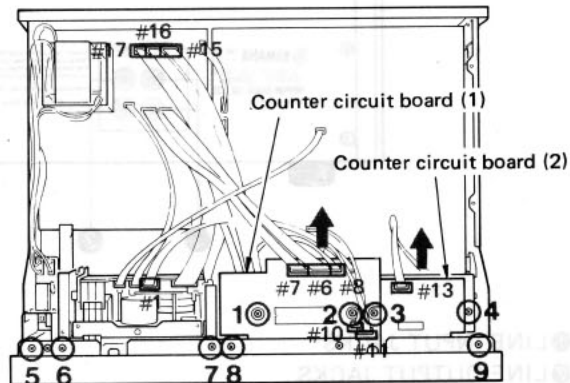


Fig. 3



## DISASSEMBLY PROCEDURES OF CASSETTE MECHANISM

### 1. Cassette mechanism unit removal

- Remove the top cover.
- Disconnect the connectors (#1, #3, #4 and #5) connected to the relay circuit board. (Refer to fig. 15)
- Disconnect the head lead wire connectors (#25, #26 and #27). (Refer to fig. 15).
- Remove screws ① and ⑫ in Fig. 2 and screws ⑥ and ⑦ in Fig. 3 and screws ① and ② in Fig. 4, and then pull out the cassette mechanism unit backward gently.

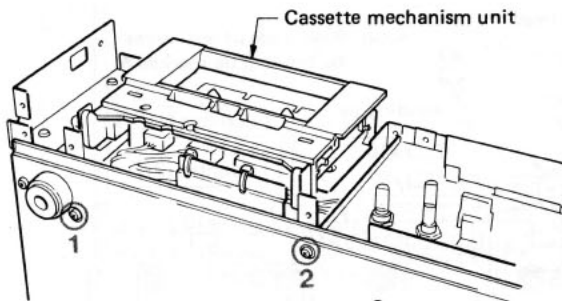


Fig. 4

### 2. Idler Ass'y replacement

- Remove screw ① in fig. 5 and open the cassette holder.
  - \* Be careful of the spring position when assembling it.
- Loosen the lead wires (orange and white-colored) of LED on the blind plate.
- Remove screws ② and ③ in fig. 5 and then remove the blind plate.

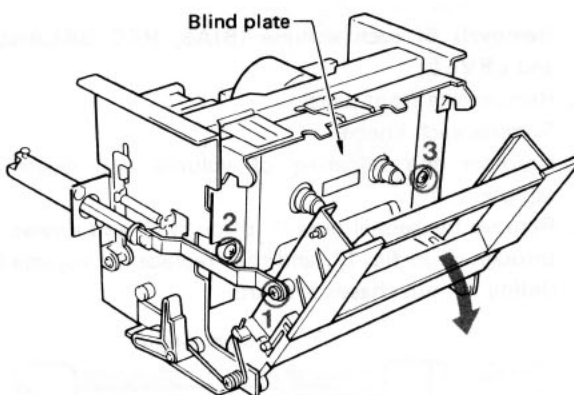


Fig. 5

- Remove screw ① and idler spring in fig. 6, and replace the idler ass'y.

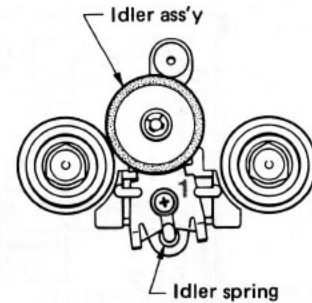


Fig. 6

### 3. Recording/Playback Combination Head & Erase Head replacement

- Remove screw ① in fig. 7 and loosen screw ② in fig. 7, and then remove M circuit board plate.
- Remove screw ③ in fig. 7 and open the cassette holder.
- Unsolder the lead wires of heads.
  - \* Refer to fig. 9 when connecting them.
- Remove screws ① and ② in fig. 8 and then replace the recording/playback combination head.
- Remove screws ③ and ④ in fig. 8 and then replace the erase head.
  - \* Check head azimuth adjustment when replacing the recording/playback head.
  - \* Check height adjustment of erase head guide when replacing the erase head.

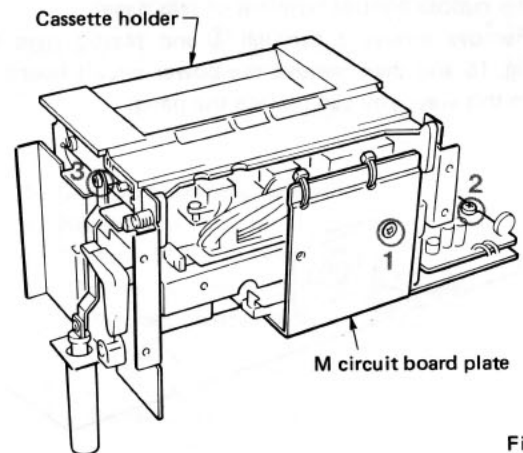


Fig. 7

### 4. Pinch roller replacement

- Open the cassette holder.
- Remove the washer ① in fig. 10 and then replace the pinch roller arm assembly.
  - \* Refer to fig. 10 as to the position of pinch roller spring.

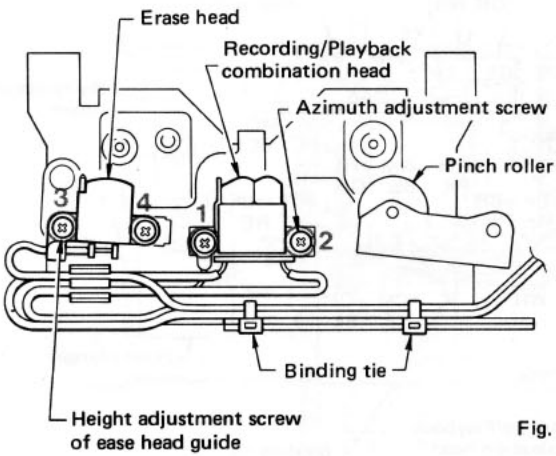


Fig. 8

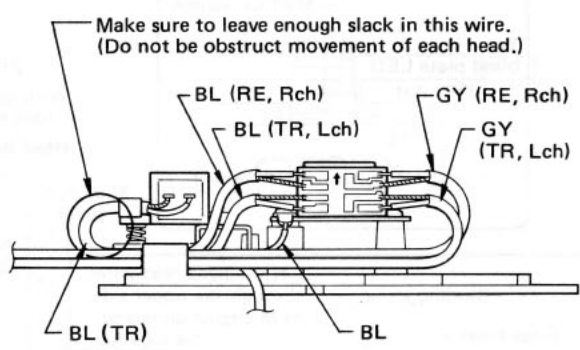


Fig. 9

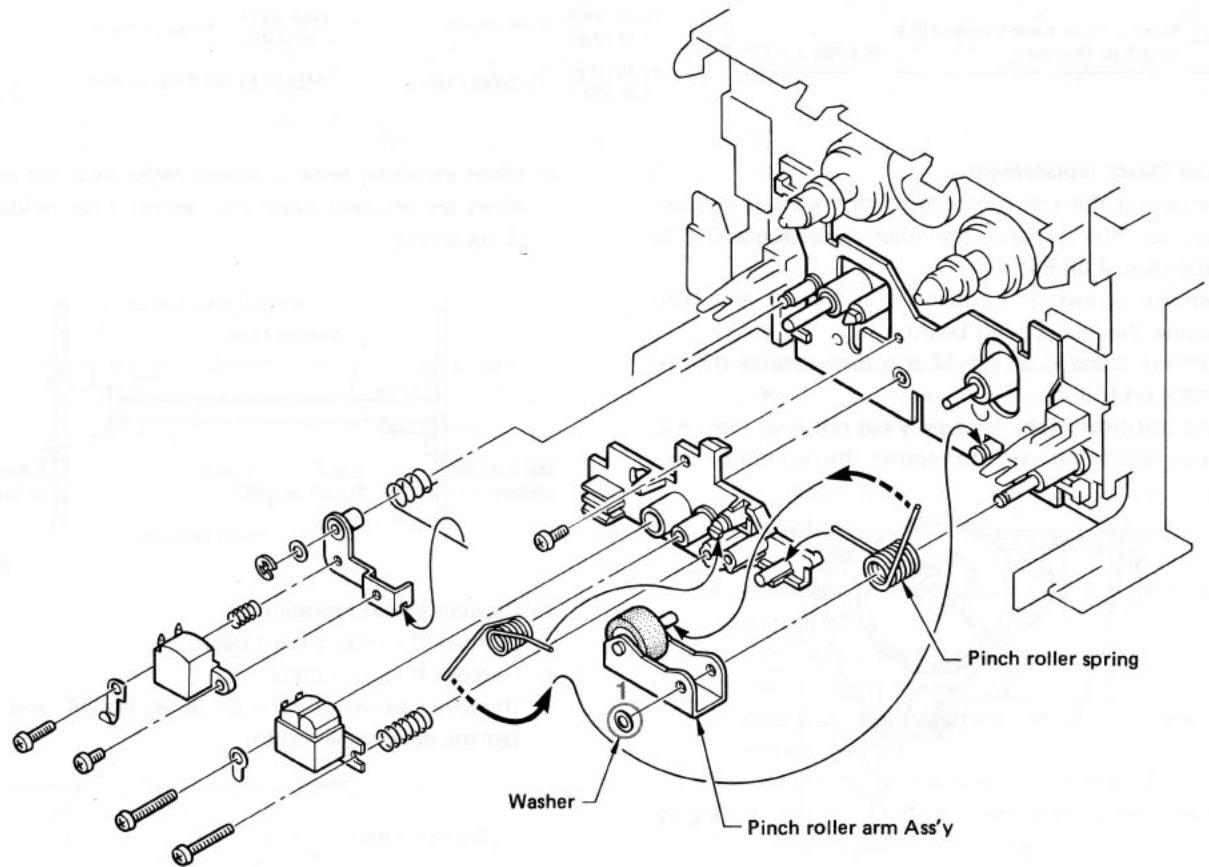


Fig. 10

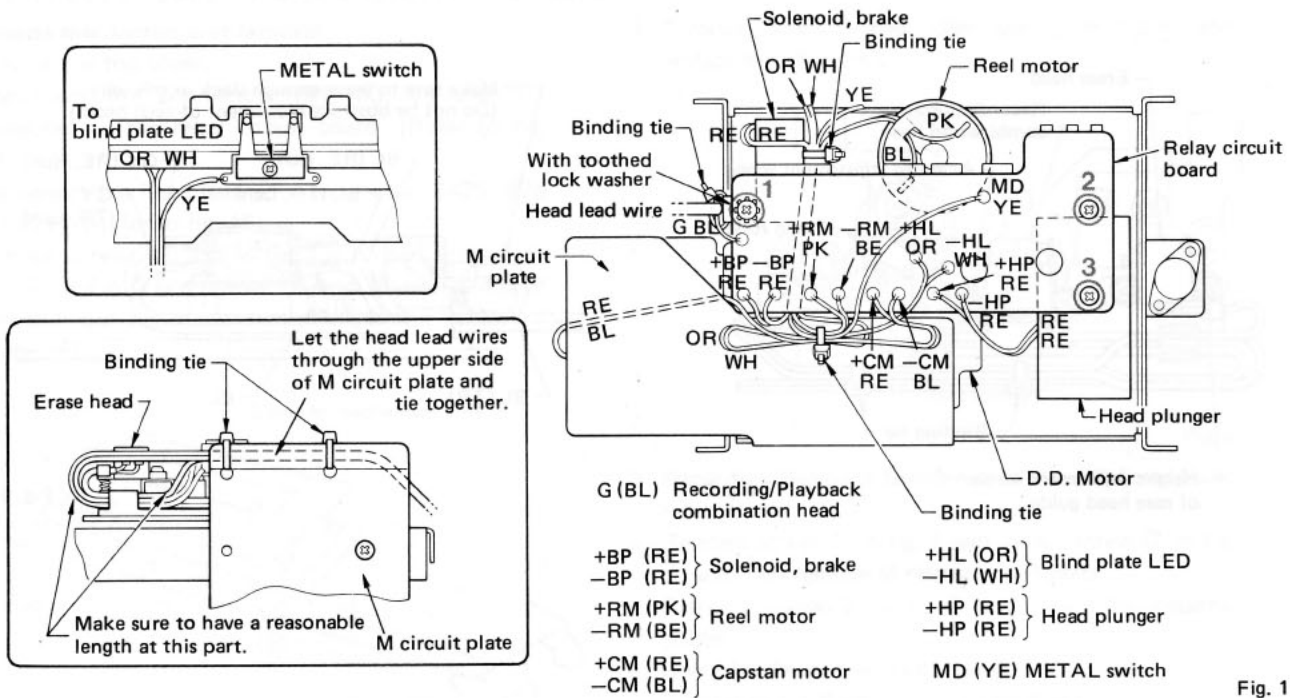


Fig. 11

**5. Reel Motor replacement**

- a. Removing the reel motor with idler ass'y is impossible, so first remove the idler ass'y according to procedure 2 on P4.
- b. Remove screws ① through ③ in fig. 11 and then remove the relay circuit board.
- c. Remove screw ① in fig. 12 and then remove the reel motor unit.

\*At this time, if the idler ass'y has not been removed, you will not be able to remove the reel motor unit.

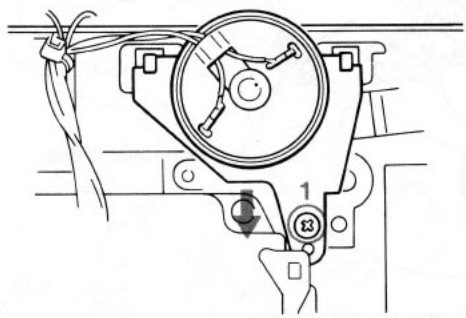


Fig. 12

- d. When installing relay C. board, make sure that acrylic fibers are securely fitted into acrylic fiber holders (2 rotations).

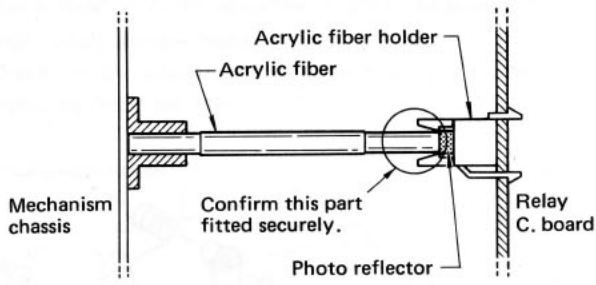


Fig. 13

**6. Capstan Motor replacement**

- a. Remove the relay circuit board.
- b. Remove M circuit plate.
- c. Remove screws ① through ③ in fig. 14 and then replace the capstan motor.

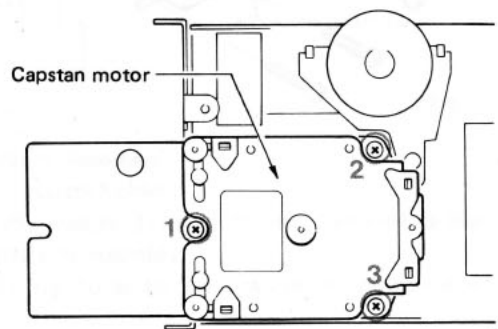


Fig. 14

## PARTS OF EACH CIRCUIT BOARD REPLACEMENT

\* Replacement of the parts on most circuit boards in this unit is possible by removing the top and bottom cover.

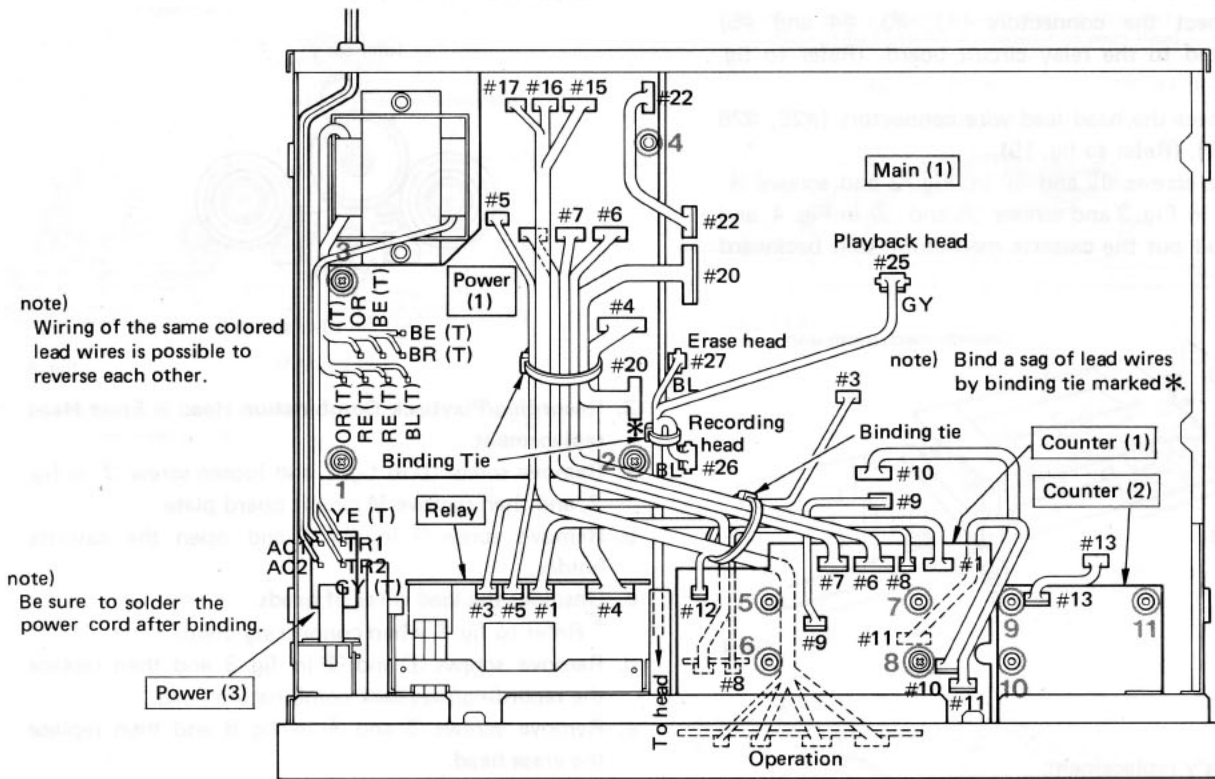


Fig. 15

### 1. Parts of power circuit board (1) replacement

- Remove plastic rivets ① and ② in fig. 16 which fix the remote control terminal of rear panel.
- Remove screws ① through ③ and plastic rivet 4 in fig. 15 and then remove the power circuit board (1). In this way, you can replace the parts.

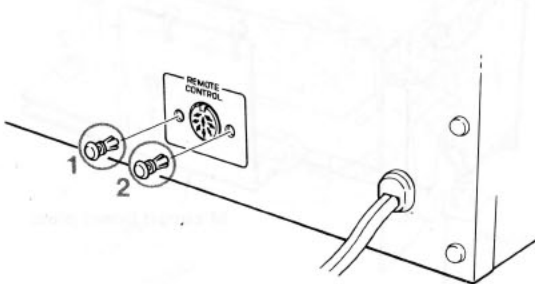


Fig. 16

### 2. Counter circuit board (1) removal

Remove plastic rivets ⑤ through ⑦ and screw ⑧ in fig. 15 and then pull out the counter circuit board (1) by sliding it backward.

\* This circuit board is connected to the front panel with connectors.

### 3. Counter circuit board (2) removal

Remove plastic rivets ⑨ through ⑪ in fig. 15 and then pull out the counter circuit board (2) by sliding it backward.

\* This circuit board is connected to the front panel with connectors.

### 4. Removals of each volume (BIAS, REC BALANCE and LEVEL)

- Remove the front panel.
- Remove each knobs.
- Unsolder the soldering of volume you desire to replace.
- Remove hexagonal nuts ① through ③ and screws ④ through ⑦ in fig. 17, and then replace the volume by sliding the sub chassis forward.

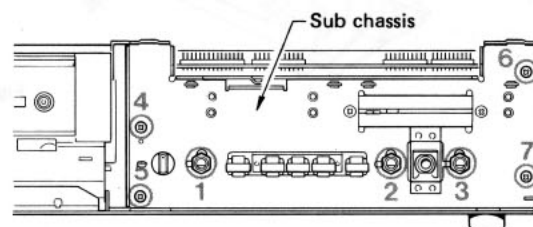


Fig. 17

## ADJUSTMENT

### CASSETTE DECK ADJUSTMENT

#### 1. Before adjustment

- Since head magnetization, dust accumulations, etc. are likely to introduce error in the various characteristics, it is very important that the heads are properly demagnetized and cleaned before commencing any adjustment, particularly frequency response and head azimuth adjustment.
- Proceed with the recording section adjustment after having finished the playback section adjustment. Should the recording section adjustment be carried out without having completed the playback section adjustment perfectly, a recorded tape may not be Played back properly with another tape deck and the adjustment itself may become impossible.

#### 2. Instruments required

- Audio frequency oscillator
- VTVM or 2 channel VTVM
- Wow/flutter meter
- Oscilloscope
- Torque meter

#### 3. Test tape required

- Tape speed adjustment  
3kHz -10dB (250nwb/m)  
MTT-111 or equivalent
- Azimuth adjustment  
10kHz -10dB (250nwb/m)  
MTT-114 or equivalent  
\* Playback frequency response tape level deviation, less than  $\pm 0.5$ dB
- Playback level  
333Hz or 315Hz (160nwb/m)  
MTT-212C or equivalent  
\* When using 333Hz (250nwb/m) tape as MTT212, add 4dB to the upper playback level.
- Playback frequency response adjustment  
LH (3180 $\mu$ s + 120 $\mu$ s)  
The tape in which the optional frequencies from 40Hz to 10kHz are recorded  
MTT-256 or equivalent  
CrO<sub>2</sub> (3180 $\mu$ s + 70 $\mu$ s)  
The tape in which the optional frequencies from 40Hz to 10kHz are recorded.  
MTT-356 or equivalent
- Reference tape  
LH YAMAHA NR 60 or TDK AD C-60  
CrO<sub>2</sub> YAMAHA CR 60 or TDK SA C-60  
METAL YAMAHA MR 60 or TDK MA C-60  
\* C-90 differs with C-60 in the thickness and bias is unequal, so adjust with the tape whose bias is of specified value.

## MECHANICAL ADJUSTMENT

### CONFIRMATION OF TORQUES

Confirm that torques are within the following ratings;

Adjustment item	Ratings	Measurement conditions
TAKE UP torque	35 $\pm$ 10 g-cm	Couple the Torque Meter (SRK CT-100M) to the deck in play mode, and read the torque of take up reel's. (While in play, read the center of deflection.)
FF torque	More than 80 g-cm	Set the Torque Meter (SRK CT-100M) to the FF mode, and when it was wound completely, read the torque of take up reel's.
REW torque	More than 80 g-cm	Set the Torque Meter (SRK CT-100M) to the REW mode, and when winding is over, read the torque of supply reel's.
BACK TENSION torque	2.5 <sup>+1.5</sup> / <sub>-0.5</sub> g-cm 2.5 <sup>+1.5</sup> / <sub>-0.5</sub> g-cm	Measure the back tension torque with the Torque Meter (CT-W) in play mode.
Pinch roller pressure	460 $\pm$ 50 g	Measure the pinch roller pressure to the capstan in play mode.
Tape tension	More than 150 g (Referential rating)	Set the power torque meter and measure the tape tension of pinch roller and capstan in play mode.



● CHECK OF FAST FORWARD AND FAST REWIND TIMES.

Insert a C-60 tape and check to ensure that time of fast forward and fast rewind is less than 75 seconds and that the tape is transported at a constant speed all the way.

● MECHANICAL ADJUSTMENT

Step	Adjustment item	Tape	Mode	Adjustment part	Rating
1	Tape speed	MTT-111 3kHz, -10dB (250nWb/m)	PB	Semi fixed variable resistor in circuit board of the D.D capstan motor.	$3000 \pm \begin{matrix} 5 \\ -15 \end{matrix}$ Hz
2	Wow/flutter	MTT-111 3kHz, -10dB (250nWb/m)	PB		Less than 0.03% (JIS WRMS)
3	Azimuth	MTT-114 10kHz, -10dB (250nWb/m)	PB	Azimuth adjustment screw of REC/PB combination head.	Set both channel levels to maximum output level and the phase difference between the left and right channels to minimum.
4	Height of erase head guide	Mirror cassette (MC-09)	PB	Height adjustment screw of erase head.	Adjust the height position so that the tape runs smoothly.

① Tape Speed adjustment

- a. Connect a Wow/flutter meter to either the left or right channel of the Line Out terminals.
- b. Play back the MTT-111 (3kHz, -10dB) test tape, and adjust the semi variable resistor located inside the DD capstan motor circuit board to obtain a frequency counter reading of  $3000 \pm \begin{matrix} 5 \\ -15 \end{matrix}$  Hz.  
(This adjustment is possible from the bottom cover side.)

\* Perform adjustment at the center of the test tape length if possible.

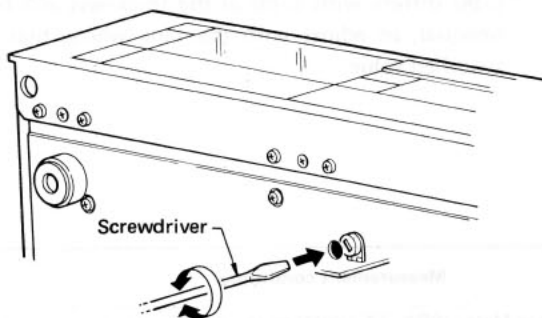


Fig. 18

② Measurement of Wow/flutter

Set the range of wow/flutter meter to 0.03% (full scale) and (JIS), and after the test tape has run about 30 seconds, check that the meter deflects less than 0.03%.

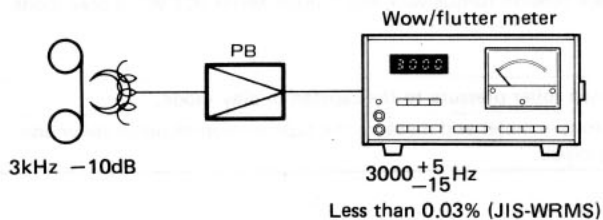


Fig. 19

③ Head Azimuth adjustment

- a. Connect a pair of VTVMs or a 2 channel VTVM, and oscilloscope to the left and right LINE OUT terminals.
- b. Remove the cassette lid.
- c. Play back MTT-114 (10kHz, -10dB) test tape, and adjust the REC/PB combination head azimuth adjustment screw to obtain maximum output level in both left and right channels, and adjust so that the phase difference between both channels becomes minimum.  
\* Be sure to attach importance to the phase difference and output level, since L and R level differences can be adjusted by Playback Equalizer.  
(Refer to electric circuit and Playback frequency response adjustment.) If the mechanical positions of VR107 and 108 are almost the same, and L and R level differences is eminent, it will be due to the degradations of mechanism, head or test tape.
- d. After the adjustment, be sure to use a screw lock paint.

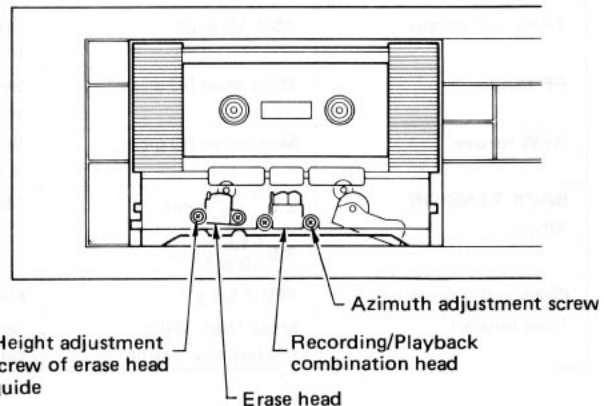


Fig. 20

● PHASE ADJUSTMENT WITH OSCILLOSCOPE

- (1) Phase adjustment with 2 channel oscilloscope
  - a. Set the MTT-111 and connect CH1 of the oscilloscope to the left channel and CH2 to the right channel.
  - b. Observe the scanning of CH1 (& CH2) with TRIGGER LEVEL.
  - c. Adjust the head azimuth adjustment screw to obtain the same waveform in both CH1 and CH2.

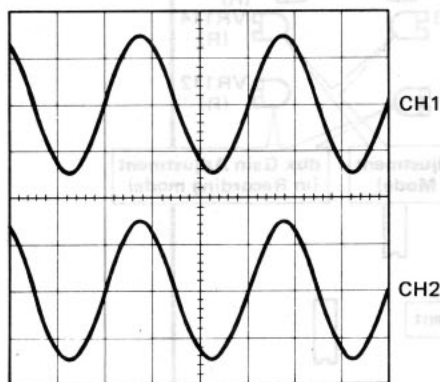


Fig. 21

(2) Phase adjustment with Lissajous figure with oscilloscope

- a. Set the MTT-111 and apply the left and right channel signals to horizontal and vertical input of the oscilloscope.
- b. Adjust the level in X – Y mode.
- c. As the phases of the left and right channels signal are just the same, a straight line as shown in fig. A will appear on it.

If the waveform as shown in fig. B or C appears, adjust the head azimuth adjustment screw to obtain the waveform as shown in fig. A.

\* If there is extreme difference of phase, the left and right ambiances will not be natural for stereo separation. Adjust so that the left and right phase difference becomes minimum.

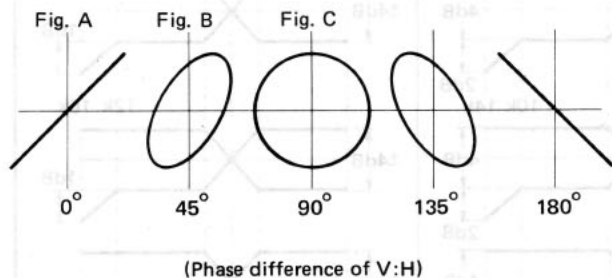


Fig. 22

- ④ Height adjustment of erase head guide
  - Play mirror cassette and observe the tape running. Adjust the height position so that the tape runs smoothly.

**NORMAL**

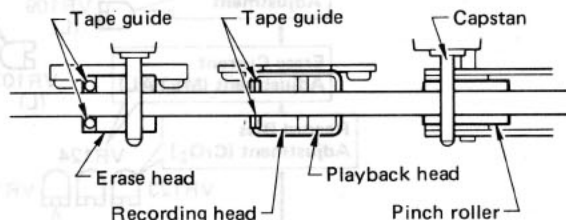


Fig. 23

**INCORRECT HEAD POSITIONING**

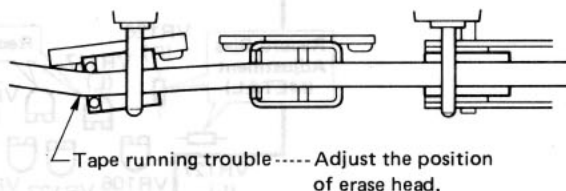
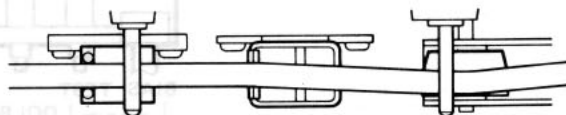


Fig. 24

**DEFECTIVE PINCH ROLLER**



Even if the head is set to its proper position, tape will not run normally if there is a transformation of pinch roller. So you must take notice of it. If this happens, replace by new one.

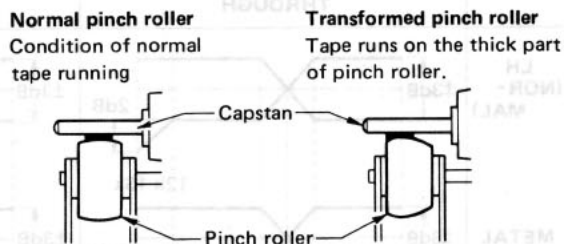
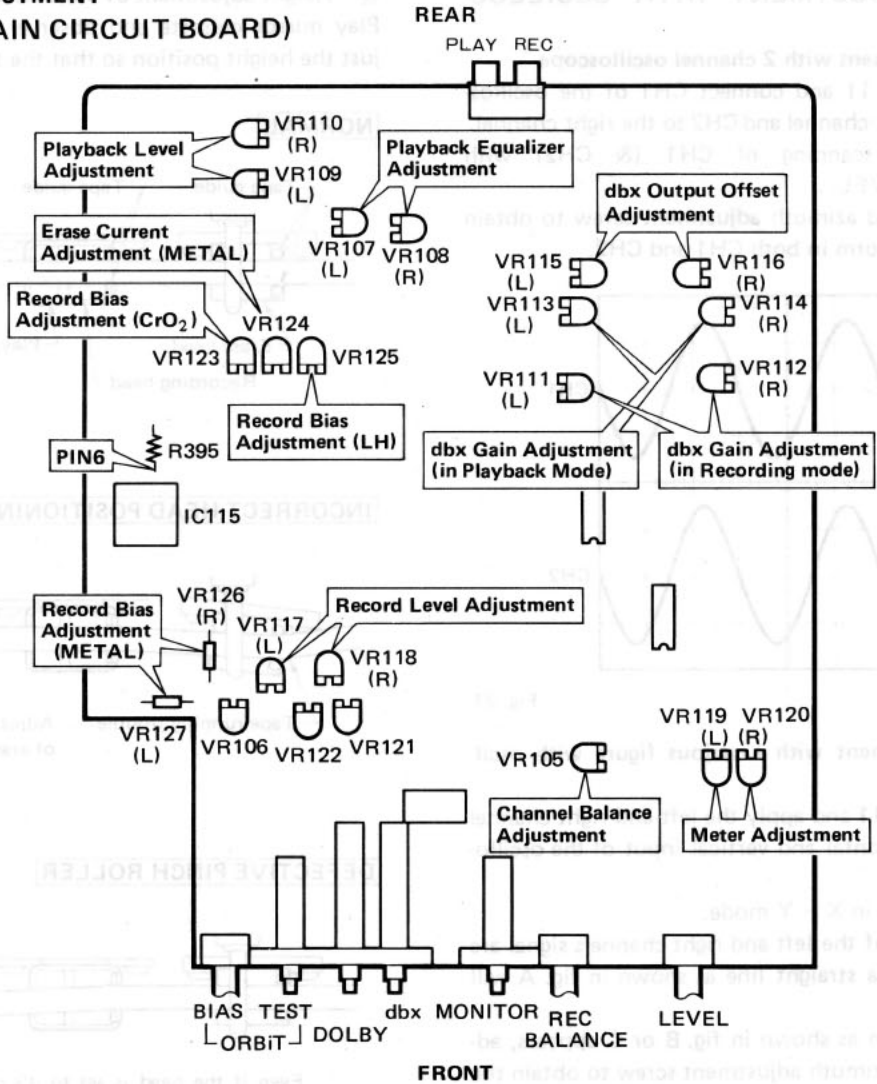


Fig. 25

**ELECTRICAL ADJUSTMENT  
TEST POINT (MAIN CIRCUIT BOARD)**



**FREQUENCY RESPONSE ADJUSTMENT**

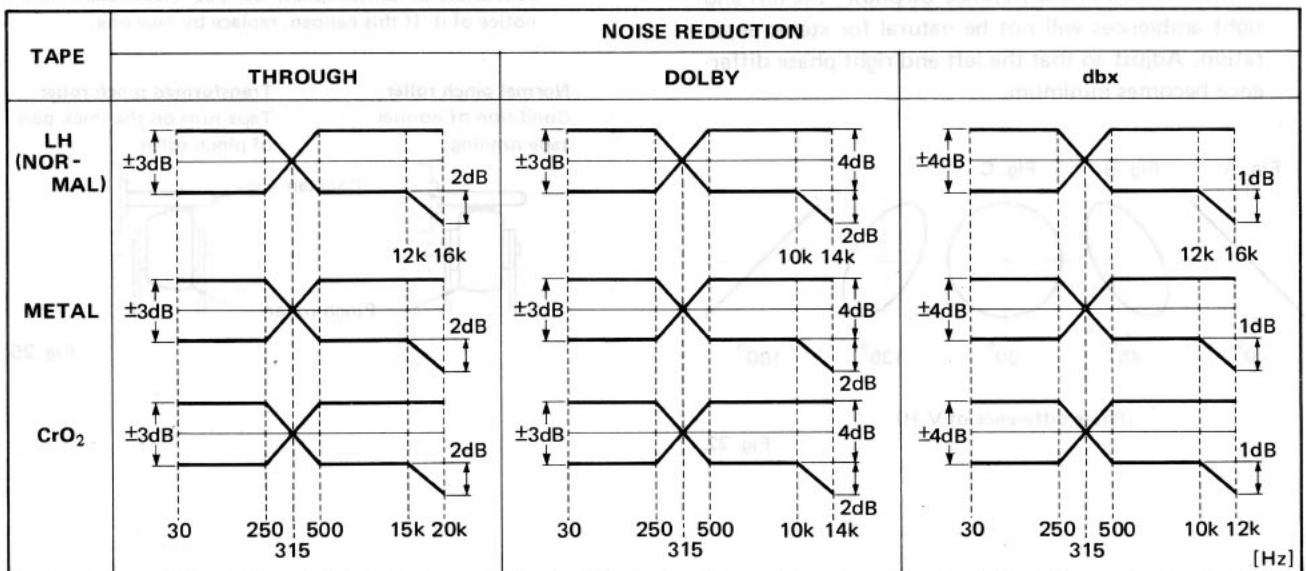


Fig. 26

• Perform each adjustment or measurement at THROUGH position of NOISE REDUCTION.

Step	Adjustment item	Tape	Mode	Required	Terminals to be connected	Adjustment part	Rating
1	Playback level	MTT-212C 315Hz 160nwb/m or MTT-212 315Hz 250nwb/m	PB		LINE OUT	VR109 (Lch) VR110 (Rch)	160nwb/m: -6dBV $\pm$ 0.5dBV (500mV $\pm$ 30mV) 250nwb/m: -2dBV $\pm$ 0.5dBV (794 mV $\pm$ 30mV)
2	Playback equalizer	Test tape for frequency check. 3180 $\mu$ s+120 $\mu$ s(LH) 315Hz, -10dB, 10kHz, -10dB or MTT-256	PB		LINE OUT	VR107 (Lch) VR108 (Rch)	Check that the 10kHz playback level lies within $0 \pm 1$ dB of the 315Hz playback level.
3	Playback frequency response confirmation	Test tape for frequency check. 3180 $\mu$ s+120 $\mu$ s(LH) (MTT-256) 3180 $\mu$ s+70 $\mu$ s(CrO <sub>2</sub> ) (MTT-356)	PB		LINE OUT		Check that the 14kHz playback level lies within $0 \pm 2$ dB of the 315Hz playback level. (Refer to Fig. 27)
4	Meter		REC SOURCE	1kHz -6dBV $\pm$ 0.5dBV (500mV $\pm$ 30mV)	LINE OUT	VR119 (Lch) VR120 (Rch)	Adjust VR119 and VR120 to the lowest level where 0dB display part of the level meter light up.
5	Record level	YAMAHA CR60 (CrO <sub>2</sub> )	REC/PB	1kHz -6dBV (500mV)	LINE OUT	VR117 (Lch) VR118 (Rch)	-6 $\pm$ 0.5dBV (500 $\pm$ 30mV)
6	Erase current	YAMAHA MR60 (METAL)	REC MUTE		PIN 6 of IC115	VR123	22.5 $\pm$ 0.5V
7	Record bias (Total frequency response)  NOTE: Perform METAL tape adjustment first.	YAMAHA MR60 (METAL)	REC/PB	17kHz -26dBV (50mV)	LINE OUT	VR126 (Rch) VR127 (Lch)	17kHz record and playback level lies within $0 \pm 2$ dB (-26dB) of the 1kHz record and playback level.
		YAMAHA CR60 (CrO <sub>2</sub> )	REC/PB	15kHz -26dBV (50mV)	LINE OUT	VR124	15kHz record and playback level lies within $0 \pm 2$ dB (-26dB) of the 1kHz record and playback level.
		YAMAHA NR60 (LH)	REC/PB	14kHz -26dBV (50mV)	LINE OUT	VR125	14kHz record and playback level lies within $0 \pm 2$ dB (-26dB) of the 1kHz record and playback level.
8	Channel balance		REC	1kHz -10dBV (316mV)	LINE OUT Between Lch and Rch.	VR105	When center of REC LEVEL within 0.2dB.

### PLAYBACK FREQUENCY RESPONSE ADJUSTMENT

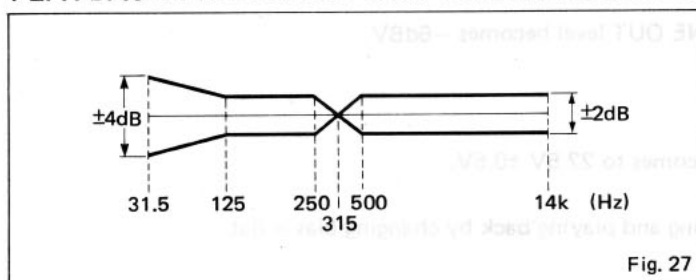


Fig. 27

- 6dBV = 500 mV = - 3.8dBm
- 2dBV = 794 mV = 0.2dBm
- 26dBV = 50 mV = -23.8dBm
- 10dBV = 316 mV = - 7.8dBm
- 21dBV = 89.1mV = -18.8dBm
- <0dBV=1V>

### ① Playback level adjustment

Play back the level readjusting test tape, and set the playback level by adjusting VR109 (Lch) and VR110 (Rch).

The standard signal level of this unit is 0dB (=−6dBV=500mV) of 315Hz, 160nwb/m, and +4dB (=−2dBV=794mV) in case that the level is 315Hz, 250nwb/m.

### ② Playback equalizer adjustment

Play back the test tape of 315Hz−10dB and 10kHz−10dB, and adjust VR107 (Lch) and VR108 (Rch) so that the high level (10kHz) is equivalent to the low level (315Hz).

If the head azimuth adjustment is not done exactly, if the high level is made up by playback equalizer, it will cause noise to increase and signal-to-noise ratio to be effected.

Be sure to do the head azimuth adjustment before adjusting the playback equalizer.

### ③ Confirmation of playback frequency response

After adjusting the playback equalizer, confirm playback frequency response.

Play back the MTT-256 (LH, 3180 $\mu$ s+120 $\mu$ s) and MTT-356 (CrO<sub>2</sub>, 3180 $\mu$ s+70 $\mu$ s) test tape, and check the output level variation.

\* If playback frequency response is not within rating, even if you could make the total frequency response flat by doing the recording bias adjustment, playing a tape recorded on another tape deck will produce unnatural sounds.

### ④ Level meter adjustment

- Set to REC SOURCE mode, and apply 1kHz sine wave signal from LINE IN. (Input level is not provided.)
- Adjust REC LEVEL and REC BALANCE so that the level of VTVM connected to LINE OUT becomes −6dBV (500mV).
- Adjust VR119 (Lch) and VR120 (Rch) so that the 0dB indicator of the level meter lights up, and in addition to this, also adjust so that the 0dB indicator goes out at the same time when the input levels of Lch and Rch are decreased at the same time.

### ⑤ Recording level adjustment

- Load a YAMAHA CR60 (CrO<sub>2</sub> tape).
- Set to REC/PAUSE and SOURCE position.
- Apply 1kHz signal, and adjust the REC LEVEL so that the LINE OUTPUT becomes −6dBV (500mV).
- Start in recording, and set to the TAPE position.
- Adjust VR117 (Lch) and VR118 (Rch) so that the LINE OUT level becomes −6dBV.

### ⑥ Erase current adjustment

- Load a YAMAHA MR 60 (METAL).
- Start in recording, and push the MUTE button.
- Adjust VR123 so that PIN 6 of IC115 (BIAS OSC.) becomes to 22.5V  $\pm$ 0.5V.

### ⑦ Recording bias adjustment

Adjust so that the total frequency response during recording and playing back by changing bias is flat.

- Set the BIAS volume to the center.
- Load a YAMAHA MR60 (METAL) tape.

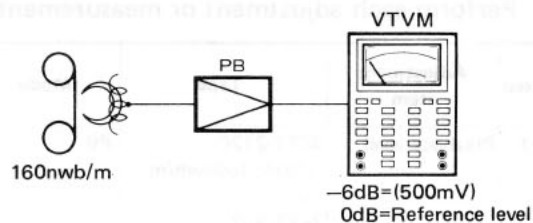


Fig. 28

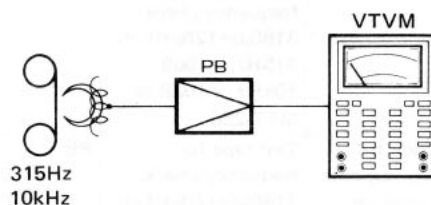


Fig. 29

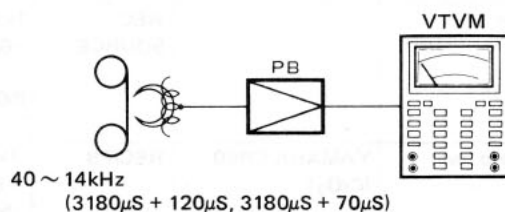


Fig. 30

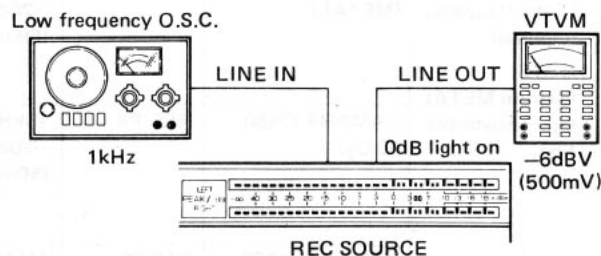


Fig. 31



- c. In REC mode (TAPE position), apply 1kHz and 17kHz of -20dB signal level (LINE OUTPUT, -26dbv=50mV) that is a standard recording level (500mV=0dB, 160nwb/m, added recording level to playback output level.).
- d. Adjust VR126 (Rch) and VR127 (Lch) so that the level difference between 1kHz and 17kHz disappears.
- e. YAMAHA CR (CrO<sub>2</sub> tape) also, in the same way, adjust VR124 so that the level difference between 1kHz and 17kHz disappears.
- f. In the case of YAMAHA NR (LH tape), in the same way, Adjust VR125 so that the level differences between 1kHz and 14kHz disappears.

● TEST OSCILLATOR ADJUSTMENT OF ORBiT(Oplimum Record Bias Tuning) SYSTEM.

		Test point	Adjustment part	Rating
Test oscillator	1kHz	TP7 ~ E	VR121	-21 ± 0.2dBV (89.1mV ± 2mV)
	10kHz	TP8 ~ E	VR122	-21 ± 0.2dBV (89.1mV ± 2mV)

\* Make sure that the difference of level between 1kHz and 10kHz is within 0.2dB.

ORBiT OSC. 1kHz

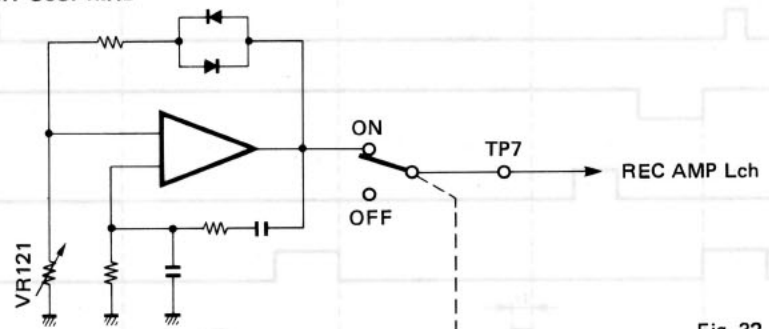


Fig. 32

ORBiT OSC. 10kHz

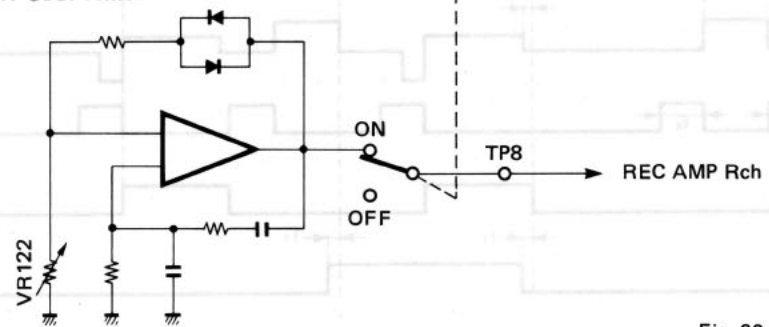


Fig. 33

Turn the TEST switch on and adjust VR121 (1kHz) and VR122 (10kHz) so that the signal levels of TR7 ~ E (1kHz) and TP8 ~ E (10kHz) becomes to -21dBV.

● dbx ADJUSTMENT

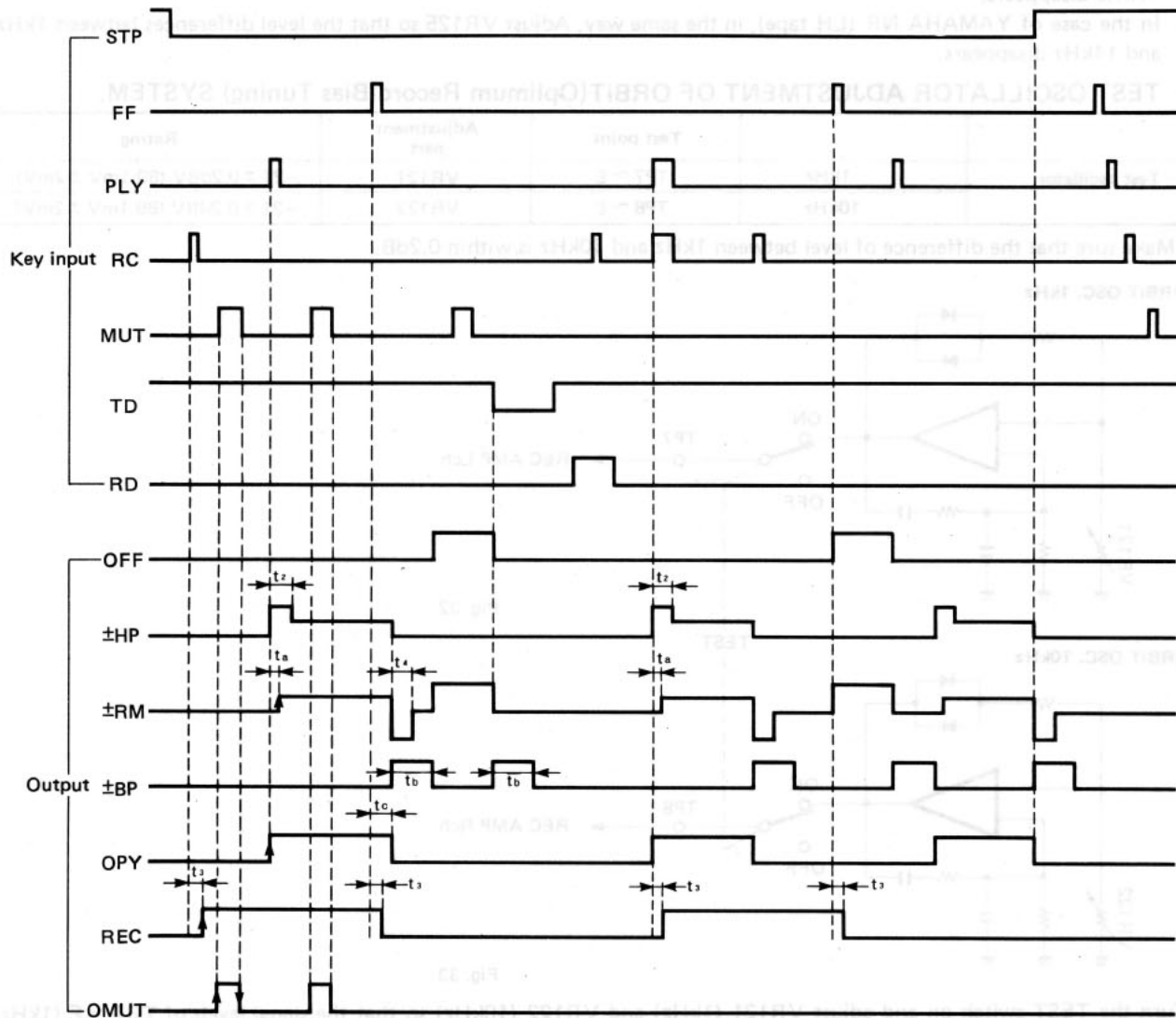
Perform this adjustment only when dbx system needs to be readjusted.

Step	Adjustment item	Input signal	Measurement condition	Measurement part	Adjustment part	Rating
1	dbx output offset		REC LEVEL : 0	TP5 (Lch) TP6 (Rch)	VR115 (Lch) VR116 (Rch)	0 ± 10mV
2	dbx gain at playback mode	TP1 (Lch) TP2 (Rch) 100Hz, 28dBV	Apply input so that the TP3 (Lch) and TP4 (Rch) becomes to 400mV.	TP5 (Lch) TP6 (Rch)	VR113 (Lch) VR114 (Rch)	400mV ± 10mV
3	dbx gain at recording mode	LINE IN 100Hz, 28.5dBV	Apply input so that the TP3 (Lch) and TP4 (Rch) becomes to 400mV.	TP5 (Lch) TP6 (Rch)	VR111 (Lch) VR112 (Rch)	400mV ± 10mV

## TIMING CHART(POWER CIRCUIT BOARD)

### FOUNDATION MOVEMENTS

Set AUTO FUNCTION to the OFF position.



Mode    STOP    REC PAUSE    REC/PLAY    STOP    FF    STOP    REC/PLAY    REC PAUSE    FF    STOP    PLAY    STOP

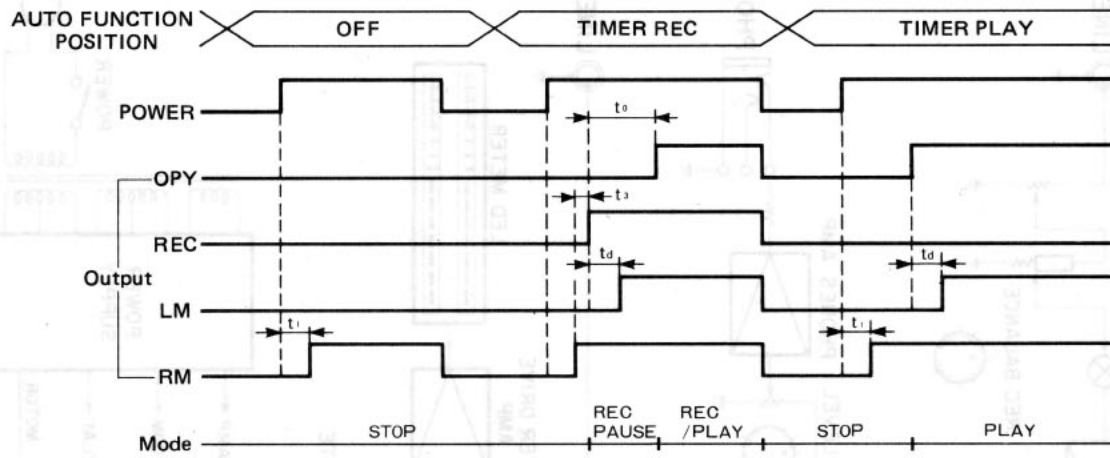
(MUTE)    (MUTE)

#### Terms and symbols

- |                              |                    |
|------------------------------|--------------------|
| STP : Stop                   | RM : Rec mute      |
| FF : Fast forward            | BP : Brake plunger |
| PLY : Play                   | OPY : Play out     |
| RC : Recording               | OMUT : Muting out  |
| MUT : Muting                 | LM : Line mute     |
| TD : Tape detector           | MEM : Memory       |
| RD : Record inhibit detector | INT : Interrupt    |
| HP : Head plunger            | ORW : Rewind out   |

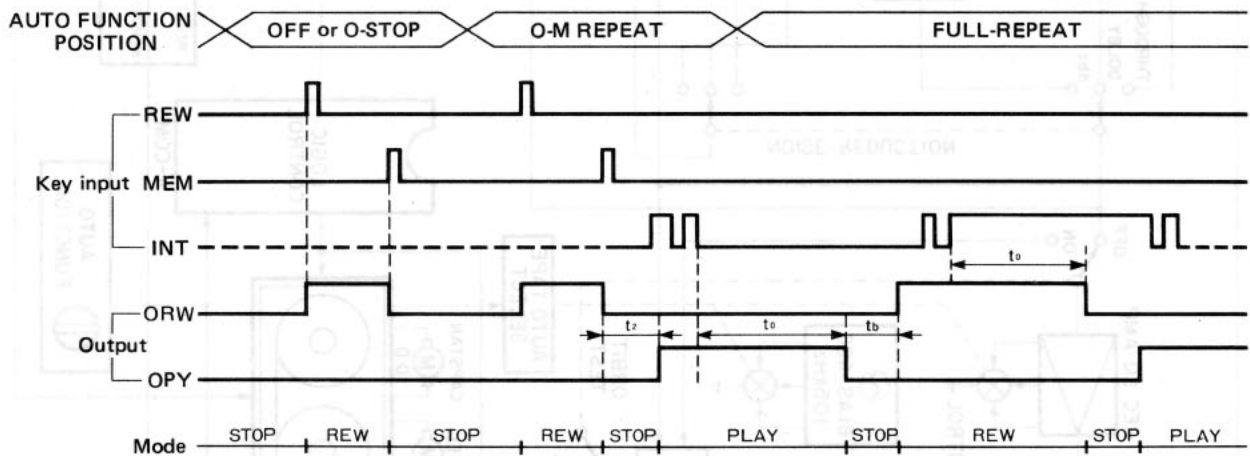
- $t_1$  : 0.1sec.
- $t_2$  : 0.3sec.
- $t_3$  : 0.01sec.
- $t_4$  : 0.04sec.
- $t_5$  : 0.1sec.
- $t_6$  : 0.2sec.
- $t_7$  : 0.05sec.

• **TIMER MOVEMENT**



$t_0$  : 2 sec.  
 $t_1$  : 0.1sec.  
 $t_2$  : 0.01sec.  
 $t_3$  : 0.15sec.

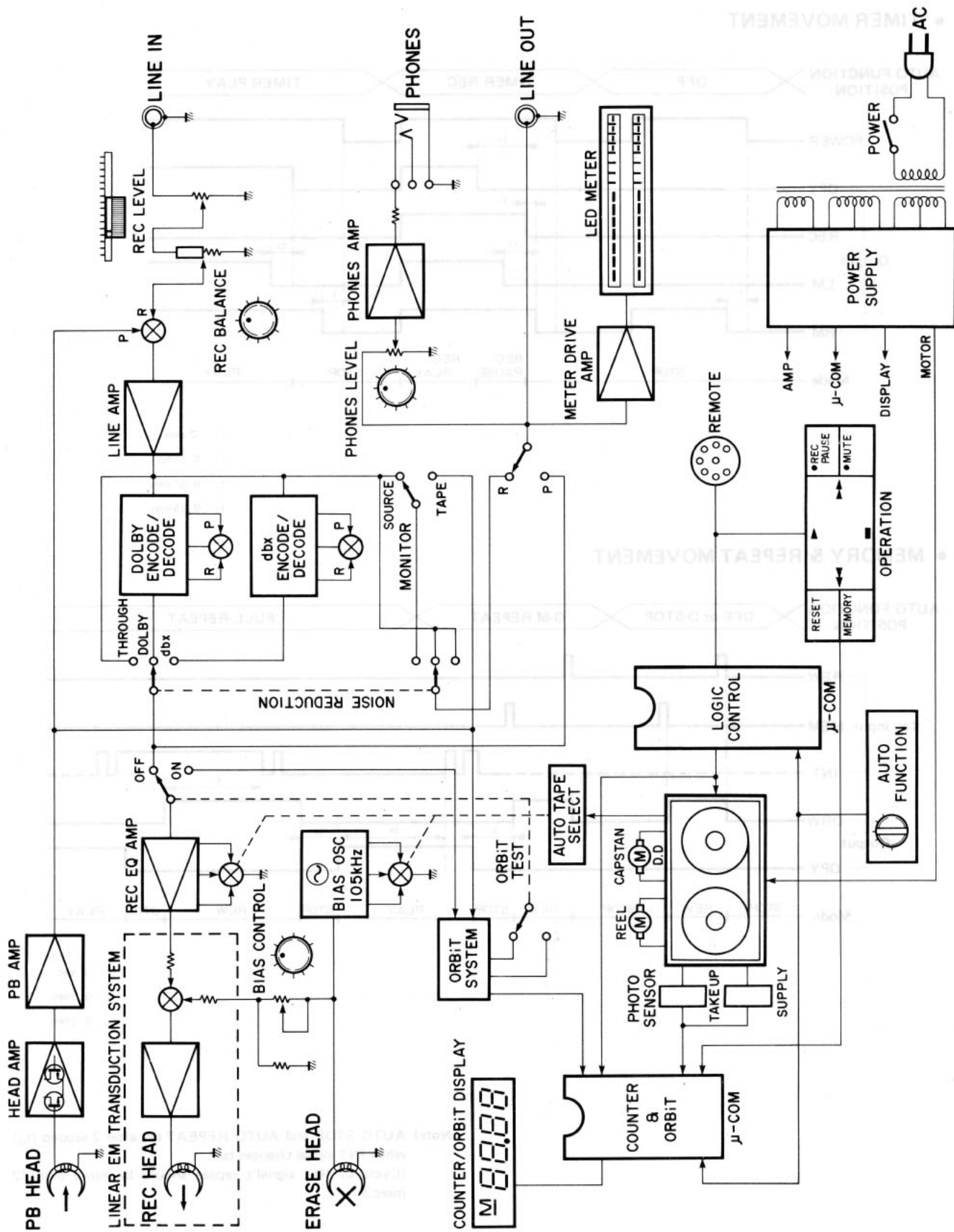
• **MEMORY & REPEAT MOVEMENT**



$t_0$  : 2 sec.  
 $t_1$  : 0.3sec.  
 $t_2$  : 0.2sec.

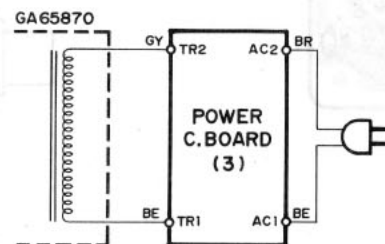
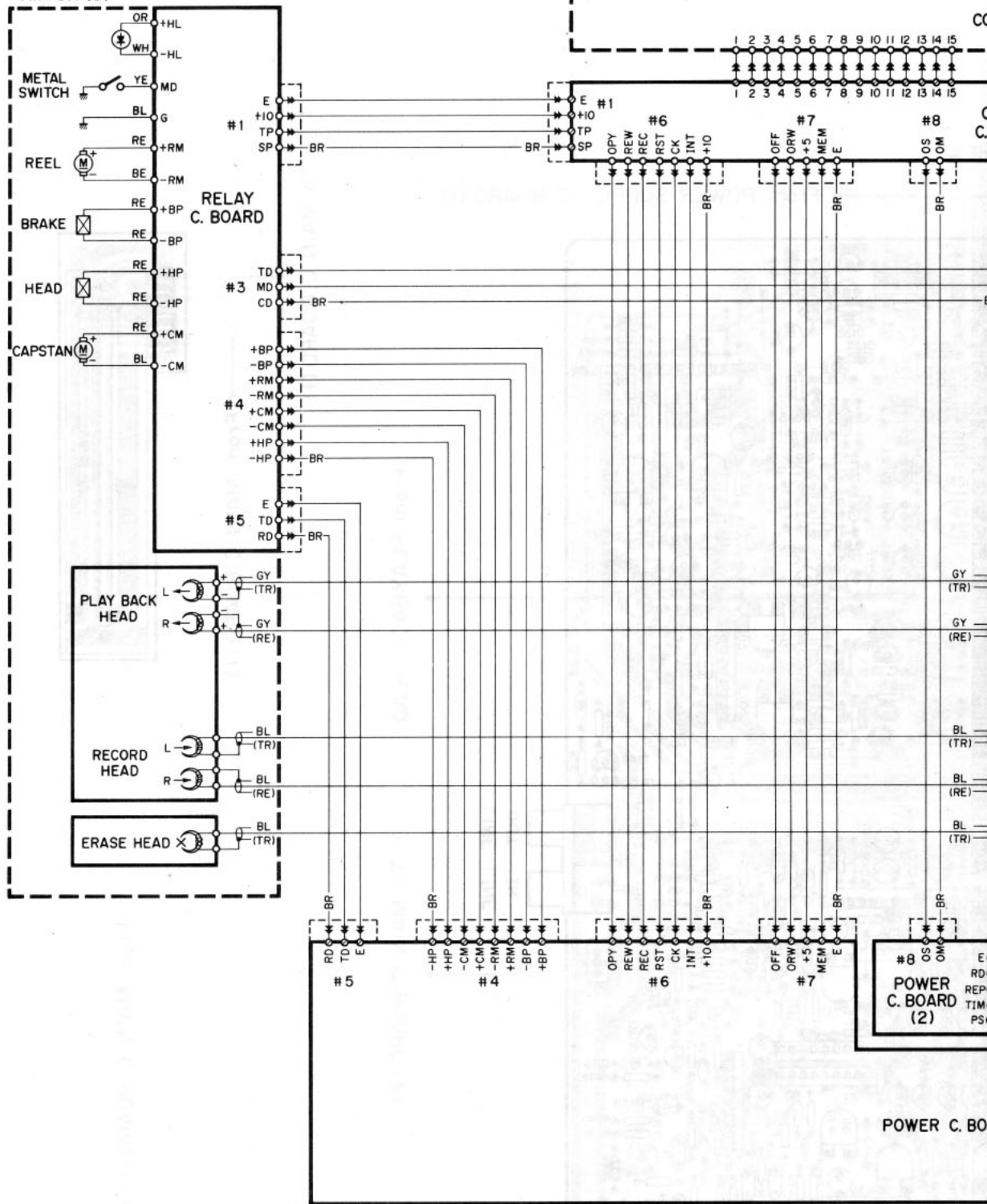
Note) AUTO STOP and AUTO REPEAT act after 2 second ( $t_0$ ) when INT signal changes last.  
 (Cycle of INT signal's repeat should be more than 12 msec.)

# BLOCK DIAGRAM

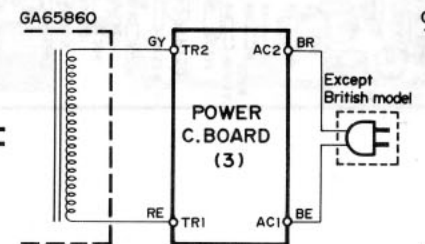


# WIRING

TM-6A (S)

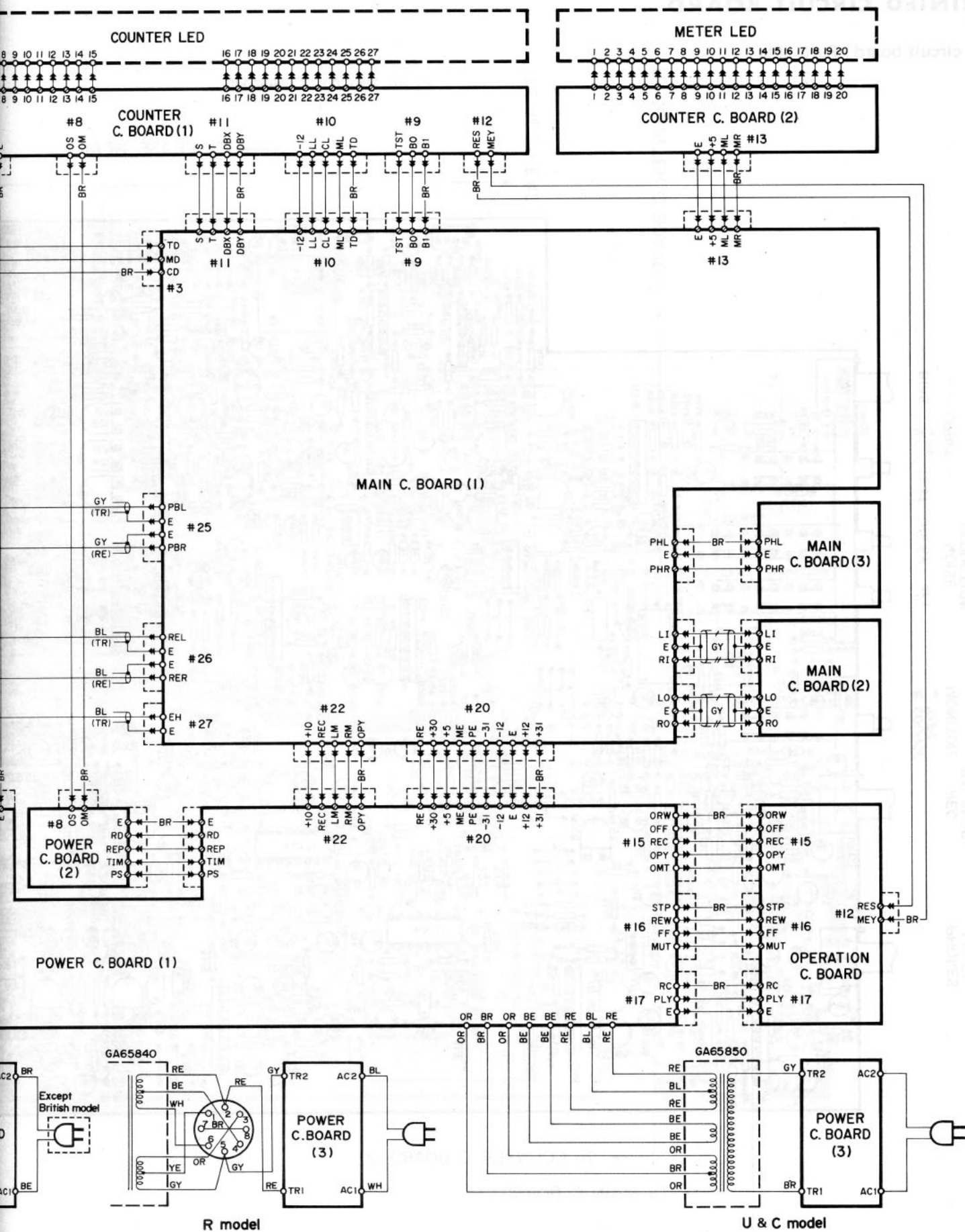


G model



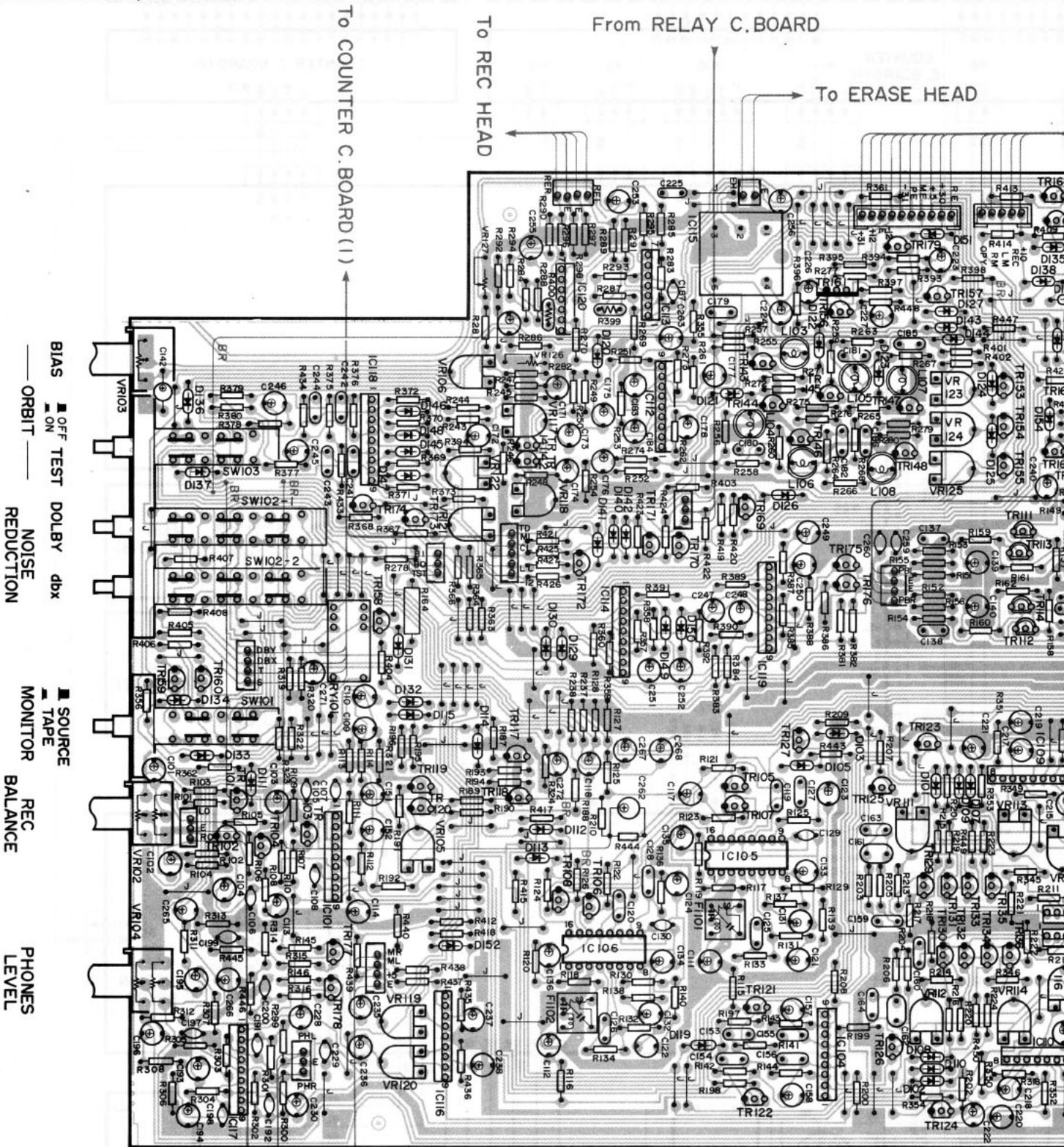
A & B models





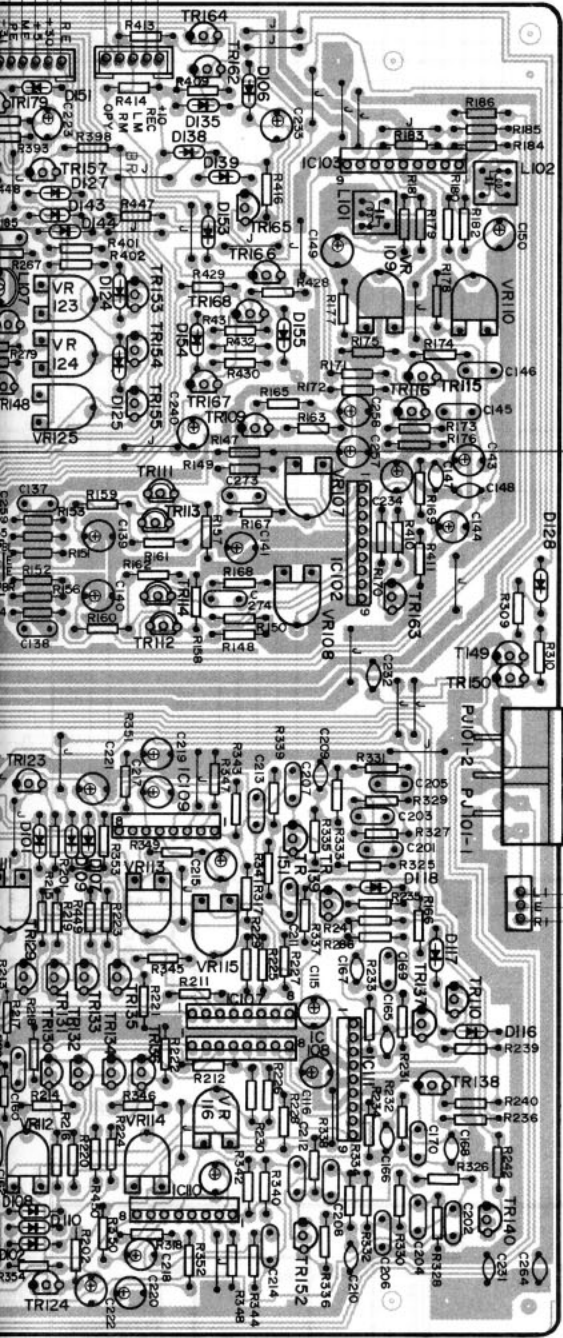
# PRINTED CIRCUIT BOARD

( Main circuit board ) Parts side



E HEAD

From POWER SUPPLY C. BOARD (1)



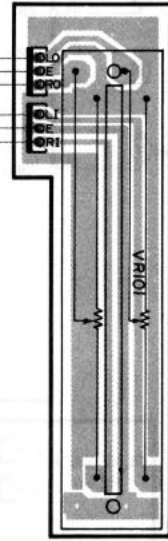
From PLAYBACK HEAD

To MAIN C. BOARD (2)

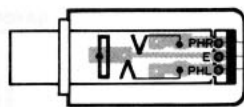
LINE LINE  
OUT IN

To MAIN C. BOARD (1)

From MAIN C. BOARD (1)

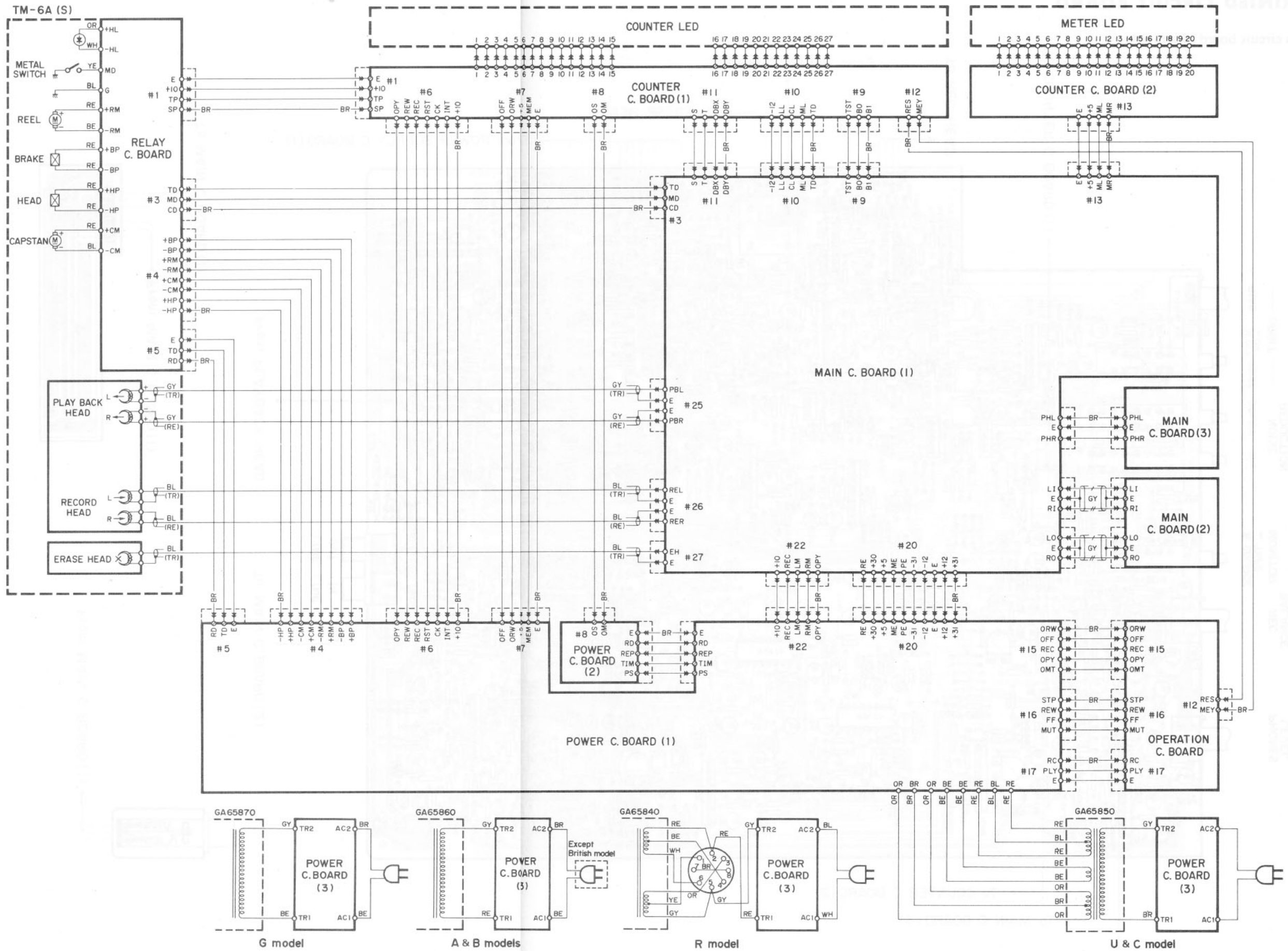


From MAIN C. BOARD (1)



WIRING

TM-6A (S)





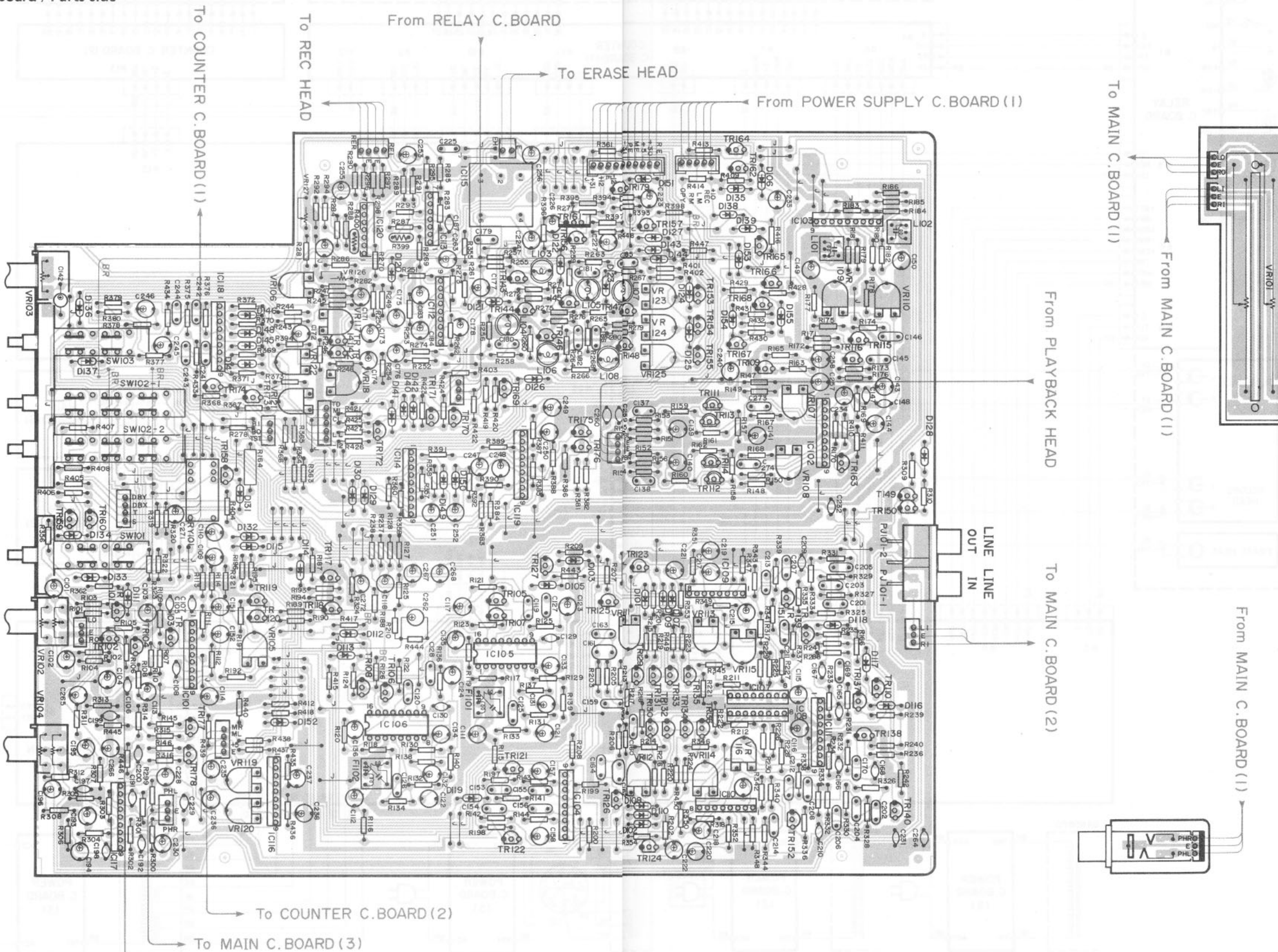
PRINTED CIRCUIT BOARD

( Main circuit board ) Parts side

BIAS OFF TEST DOLBY dbx  
ON ON NOISE REDUCTION

SOURCE TAPE MONITOR  
TAPES BALANCE

PHONES LEVEL





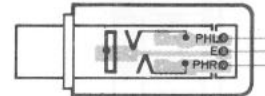
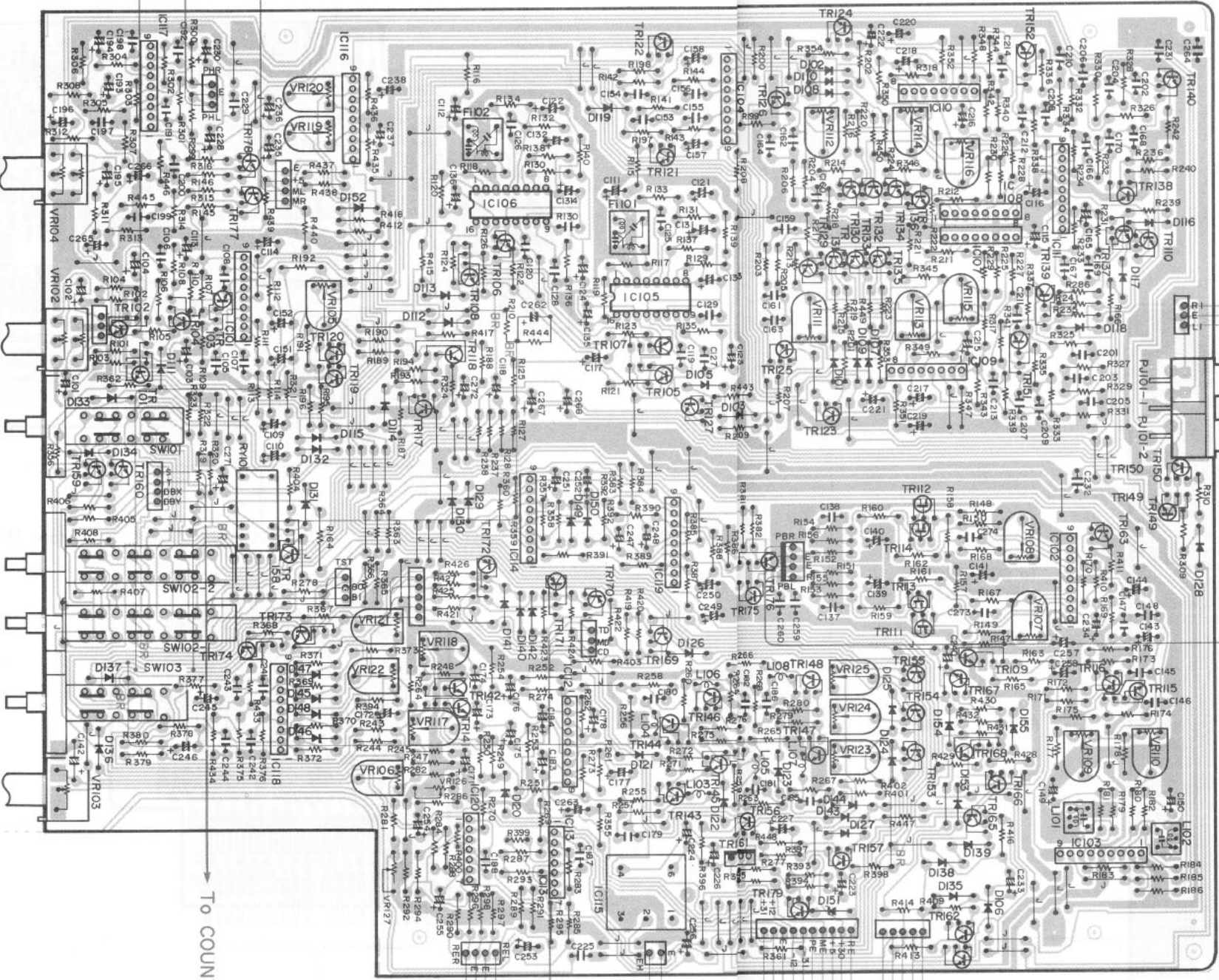
< Main circuit board > Pattern side

From MAIN C. BOARD (2)

To MAIN C. BOARD (3)

To COUNTER C. BOARD (2)

- PHONES
- LEVEL
- REC
- BALANCE
- MONITOR
- MONITOR
- SOURCE
- TAPE
- NOISE
- REDUCTION
- dbx
- DOLBY
- TEST
- ON
- BIAS
- ORBIT



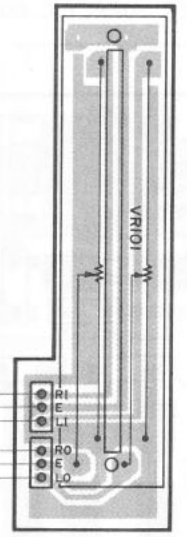
From MAIN C. BOARD (1)

To MAIN C. BOARD (2)

From PLAYBACK HEAD

From MAIN C. BOARD (1)

To MAIN C. BOARD (1)



From POWER SUPPLY C. BOARD (1)

To ERASE HEAD

From RELAY C. BOARD

To REC HEAD

To COUNTER C. BOARD (1)

1 2 3 4 5 6

1 < Main circuit board > Pattern side

From MAIN C. BOARD (2)  
 To MAIN C. BOARD (3)  
 To COUNTER C. BOARD (2)

2

PHONES  
 LEVEL  
 REC  
 BALANCE  
 MONITOR

3

SOURCE  
 TAPE

4

dbx NOISE  
 DOLBY TEST  
 REDUCTION OFF

ON  
 BIAS  
 ORBIT

5

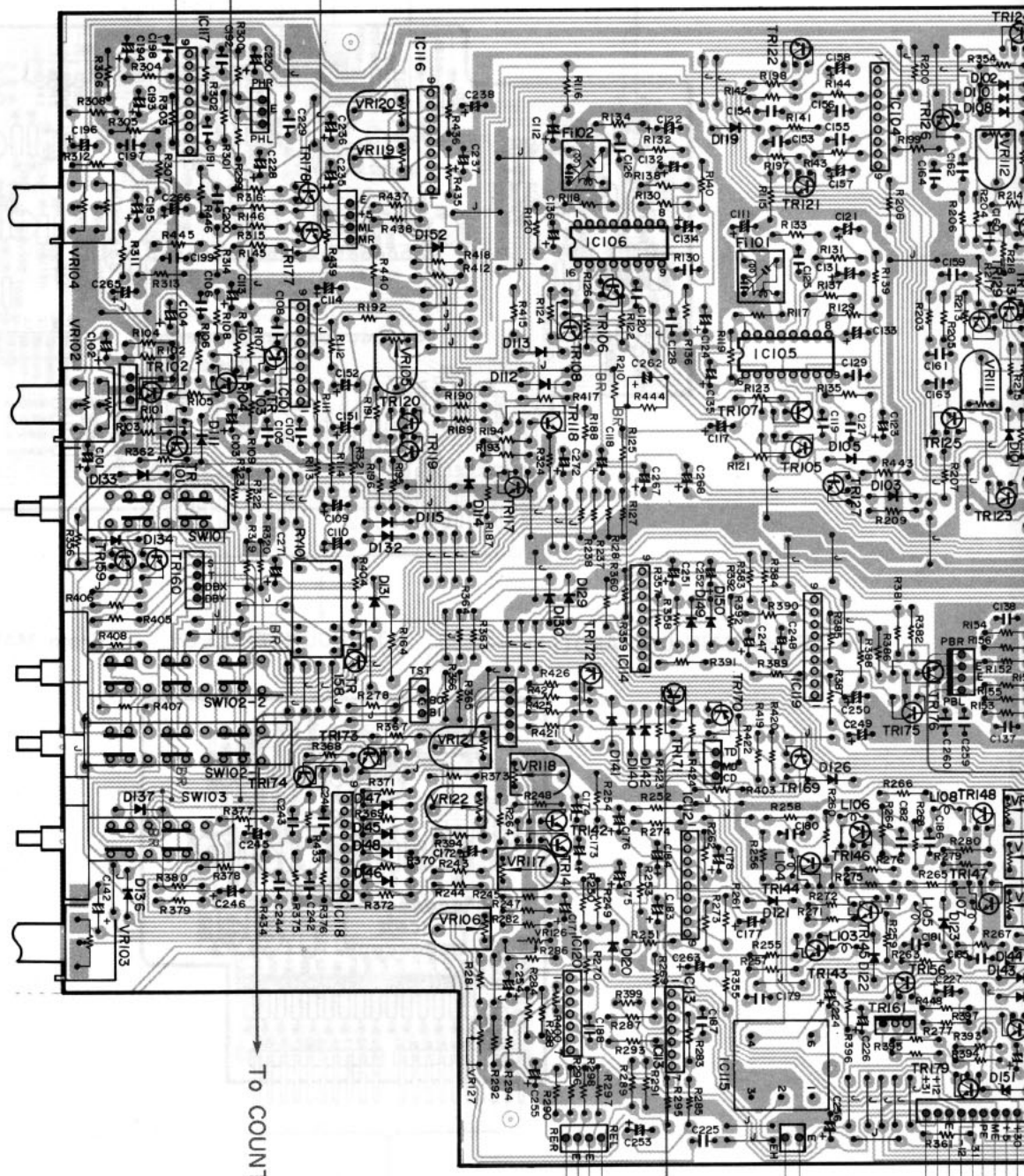
TO COUNTER C. BOARD (1)

TO REC HEAD

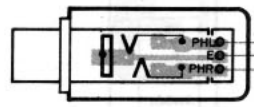
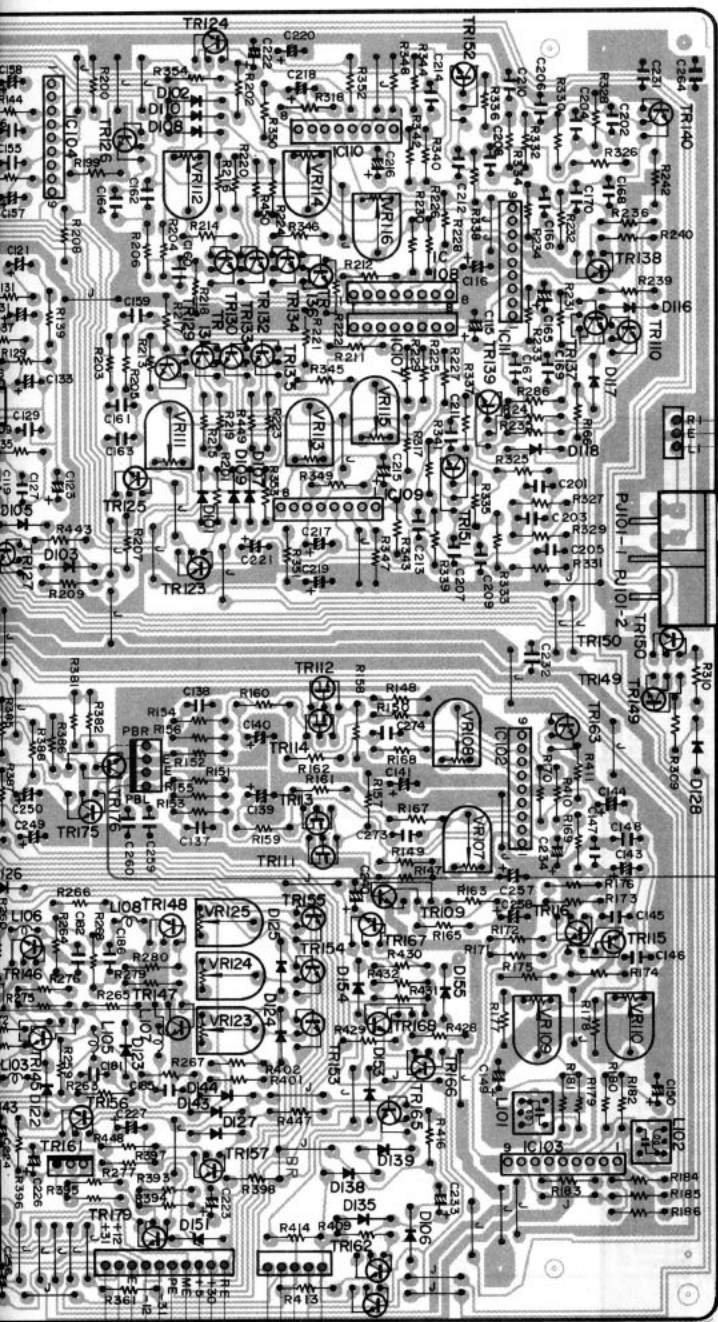
From RELAY C. BOARD

To ERASE HEAD

6



D E F G H



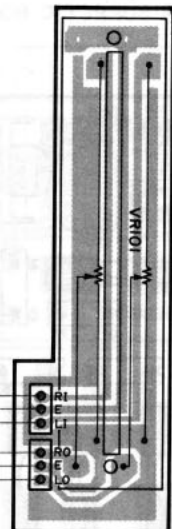
From MAIN C. BOARD (1)

LINE LINE  
IN OUT

To MAIN C. BOARD (2)

From PLAYBACK HEAD

From MAIN C. BOARD (1)



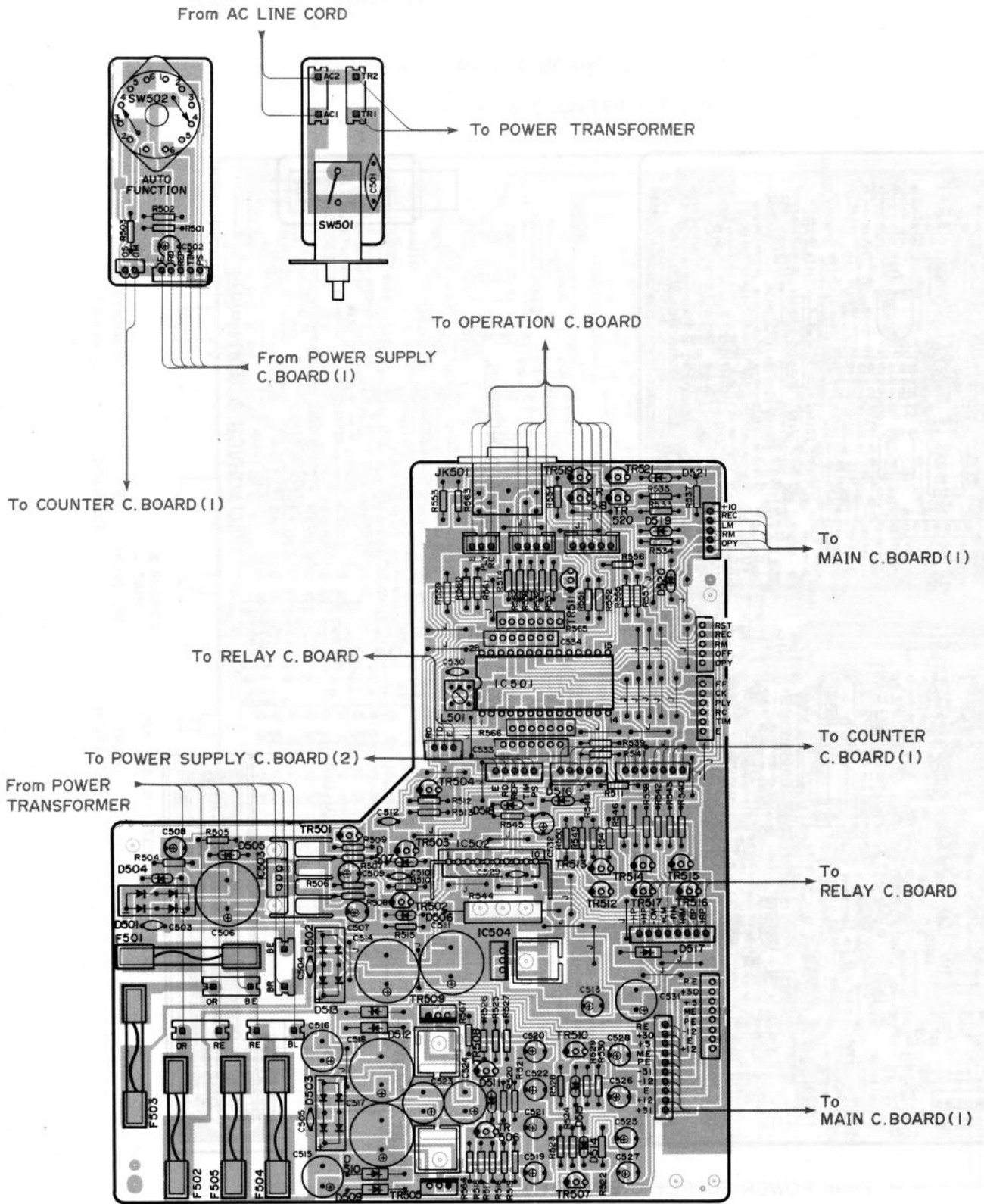
To MAIN C. BOARD (1)

From POWER SUPPLY C. BOARD (1)

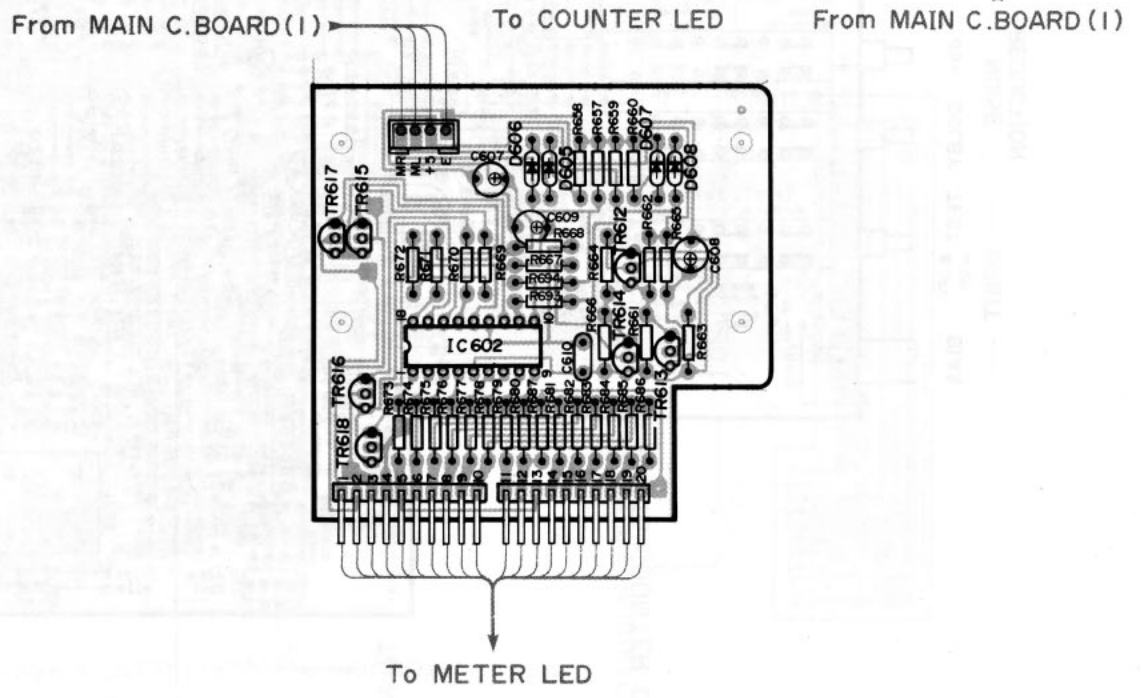
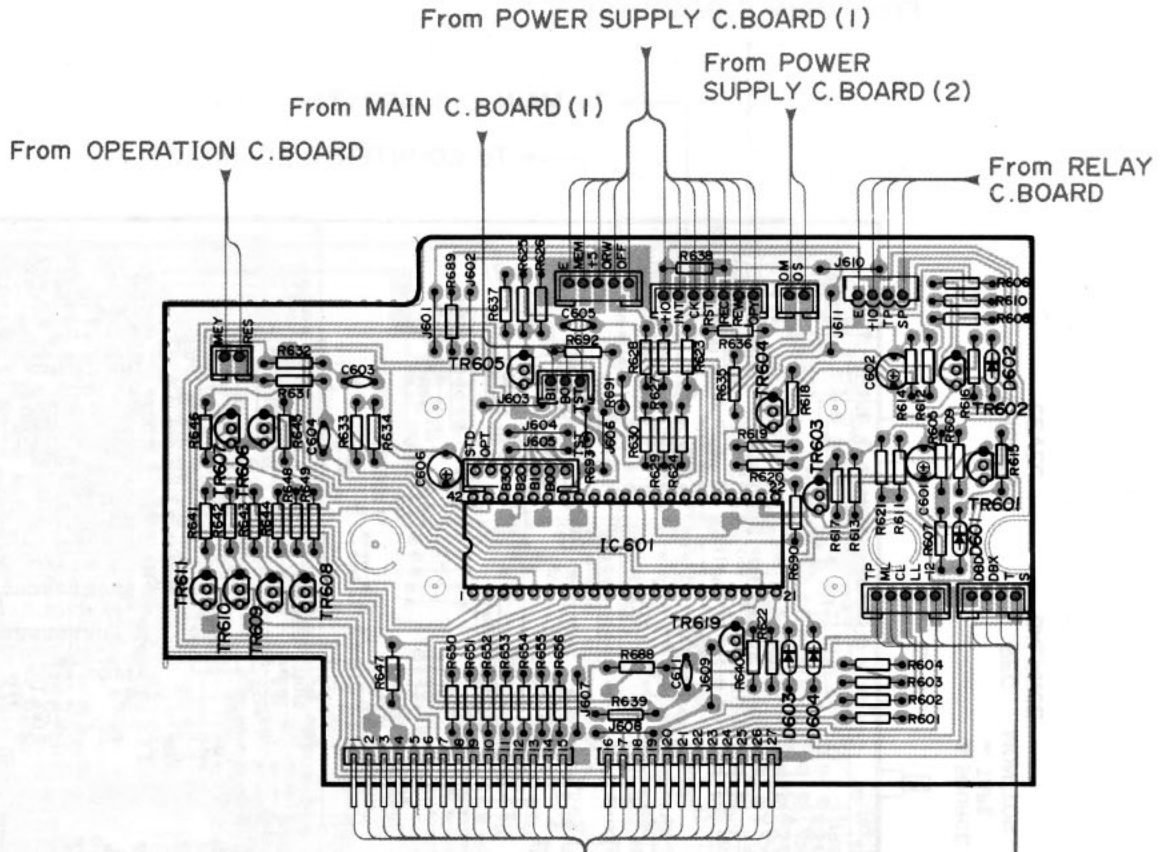
To ERASE HEAD



< Power circuit board > Parts side

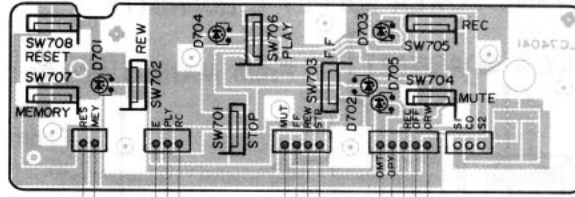


< Counter circuit board > Parts side



1 < Operation circuit board >

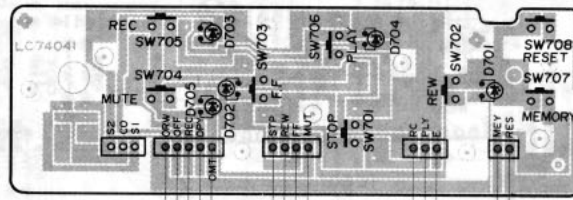
Parts side



To COUNTER C. BOARD (1)

From POWER SUPPLY C. BOARD (1)

Pattern side



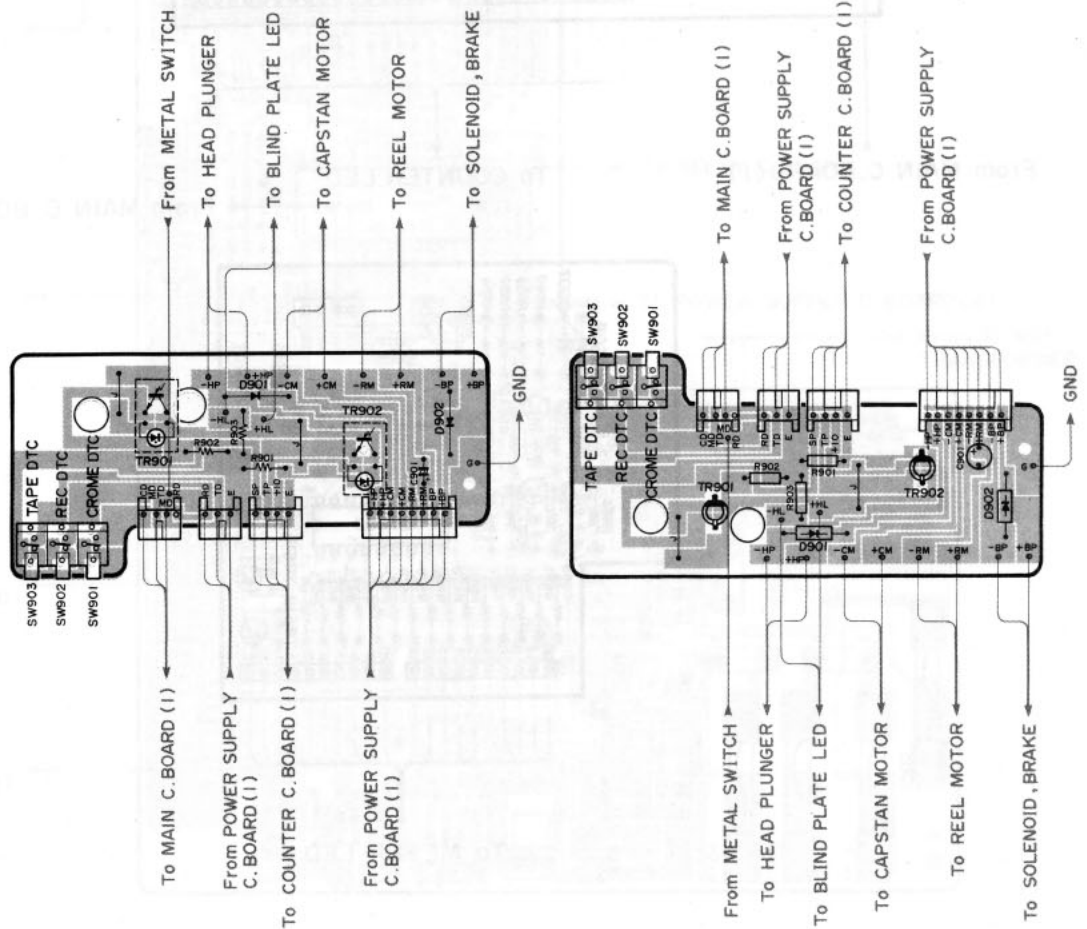
From POWER SUPPLY C. BOARD (1)

To COUNTER C. BOARD (1)

3 < Relay circuit board >

Parts side

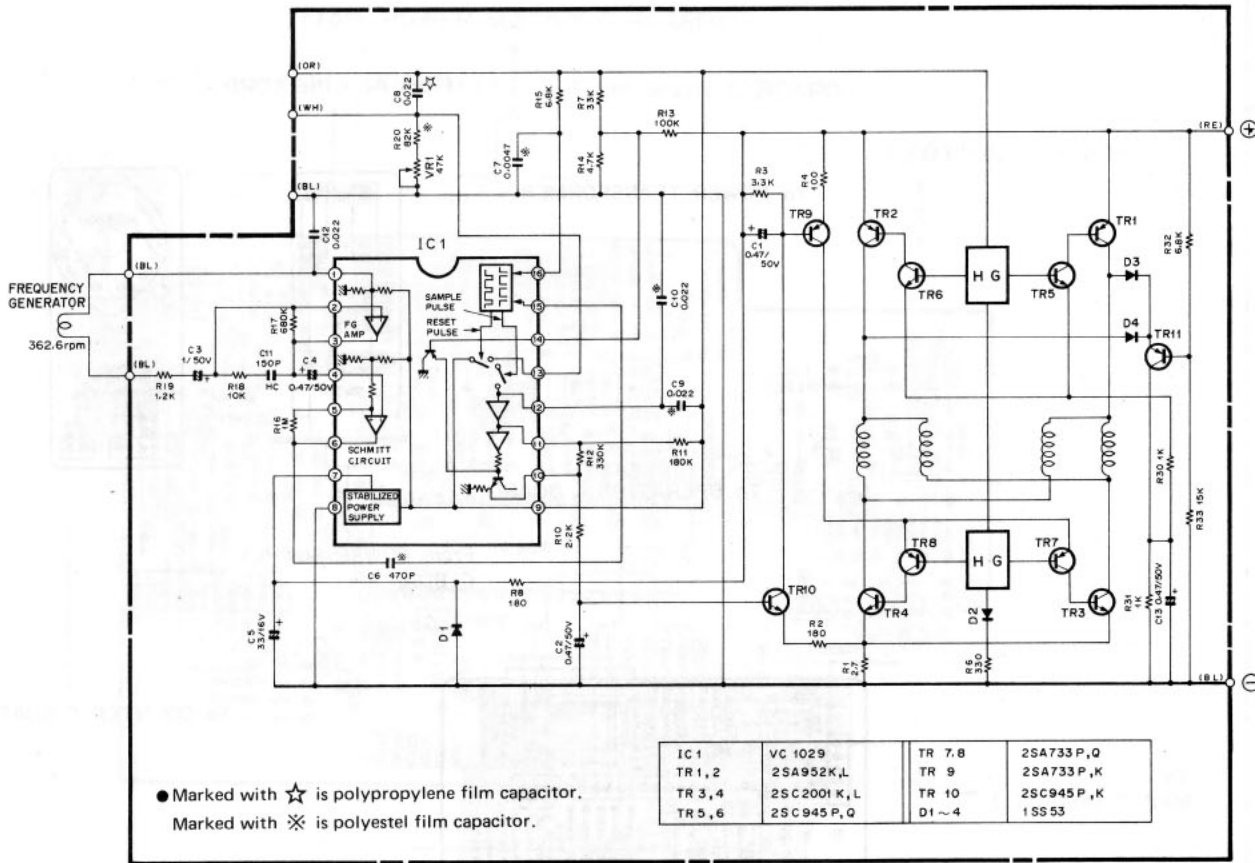
Pattern side



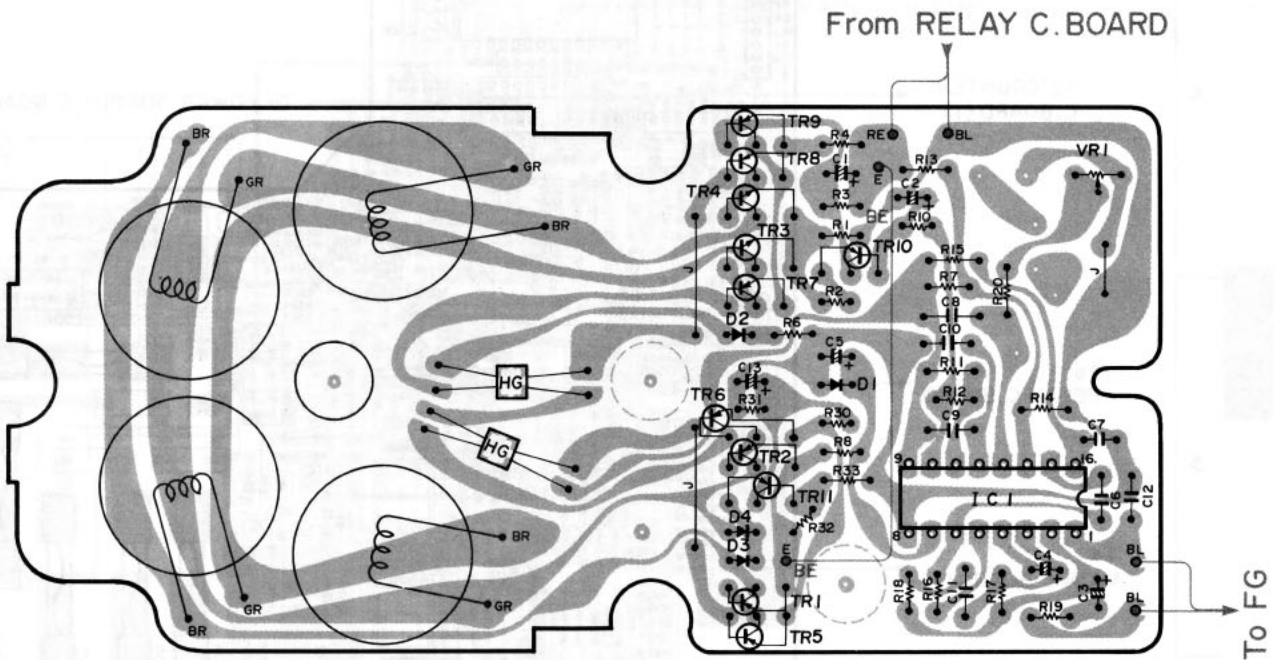


# SCHEMATIC DIAGRAM (DD Motor)

MOTOR CIRCUIT BOARD (JC00081)



## ( D.D Motor ) Pattern side



1

< Power circuit board > Pattern side

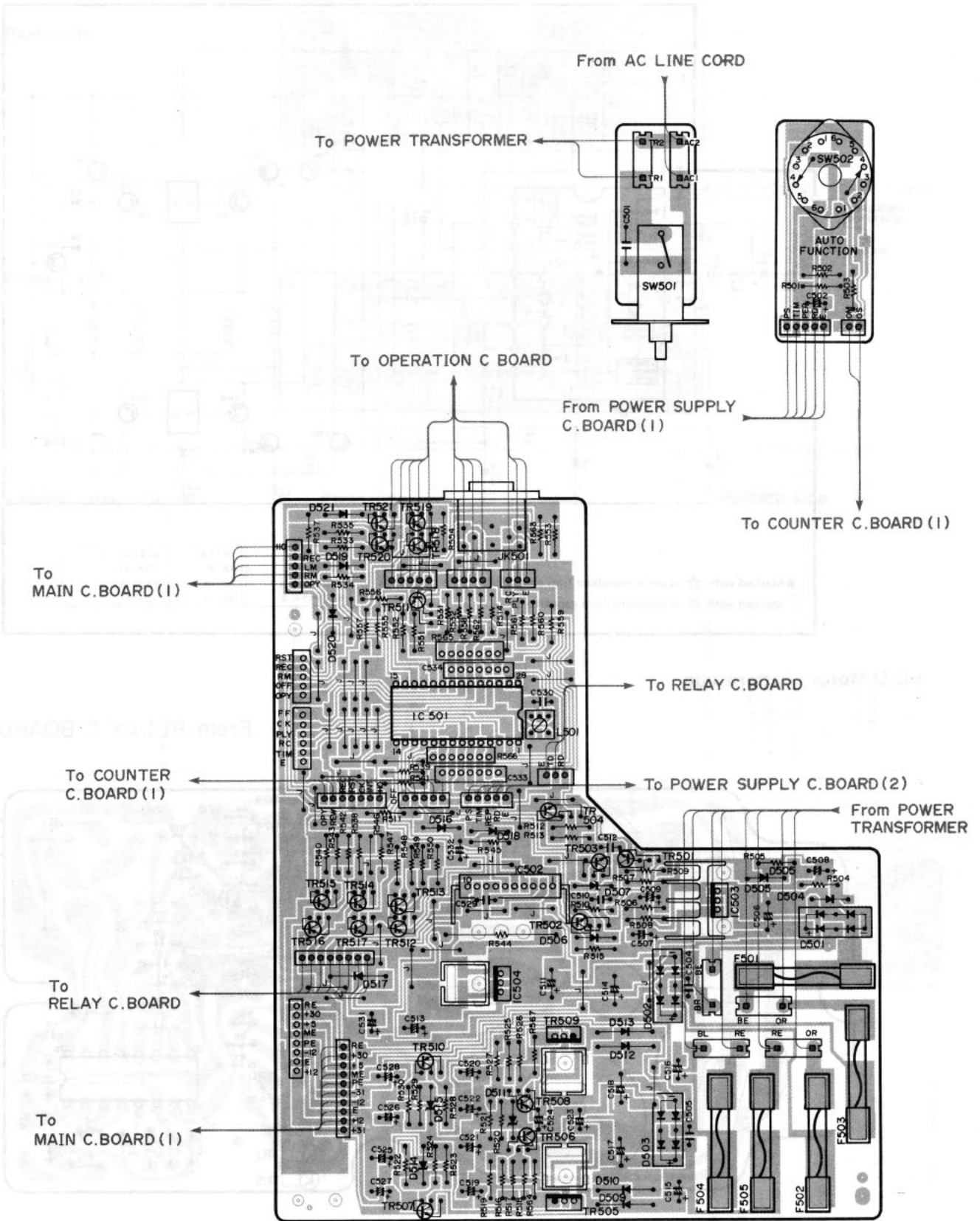
2

3

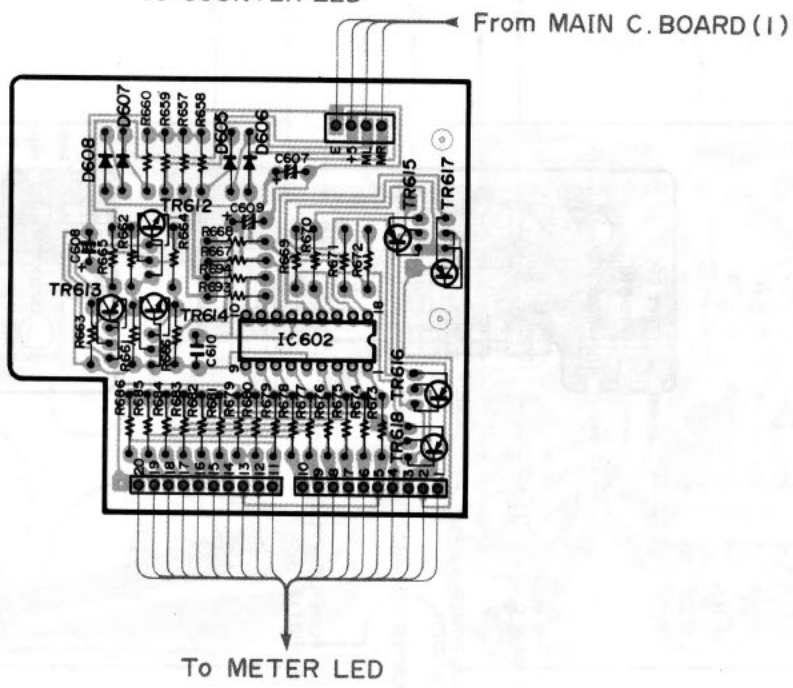
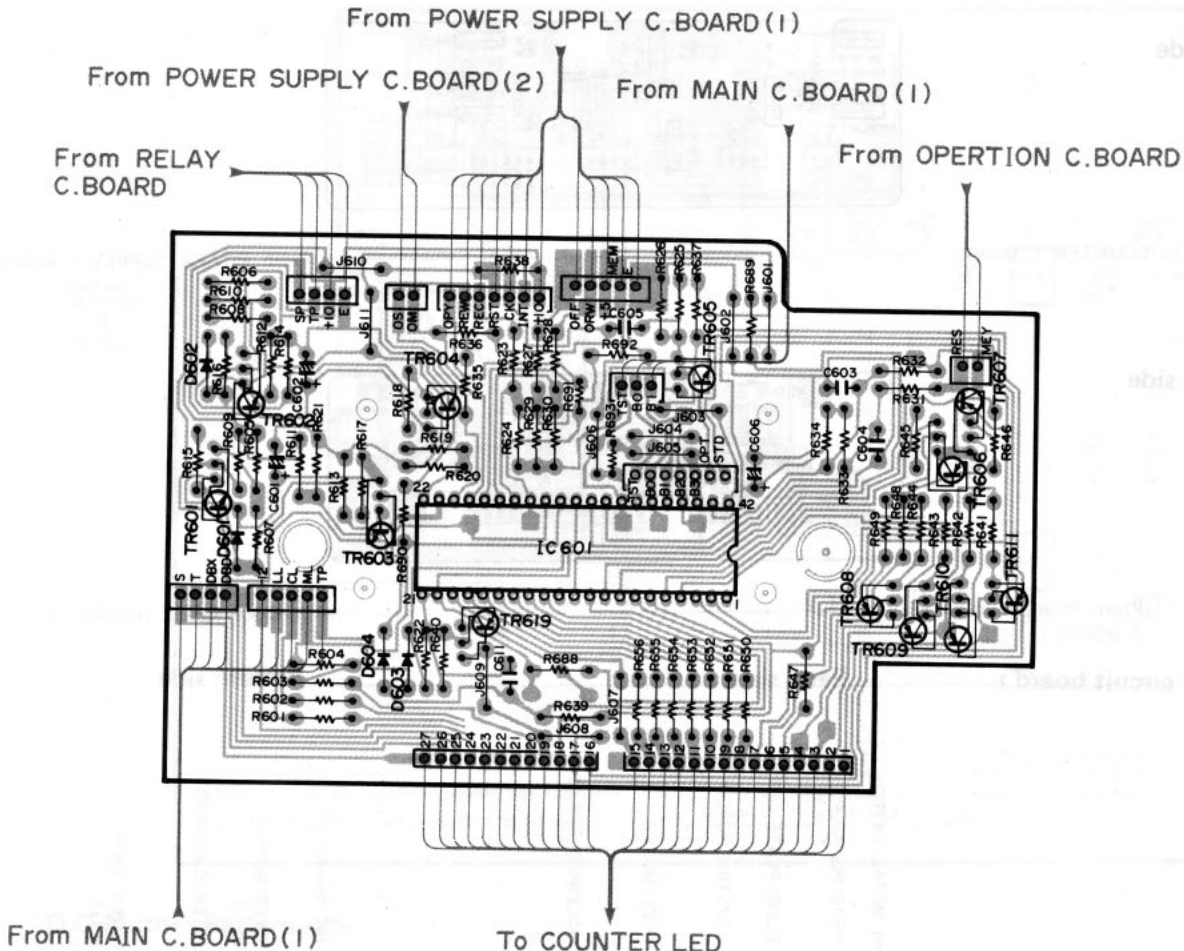
4

5

6



< Counter circuit board > Pattern side



# SCHEMATIC DIAGRAM

1

2

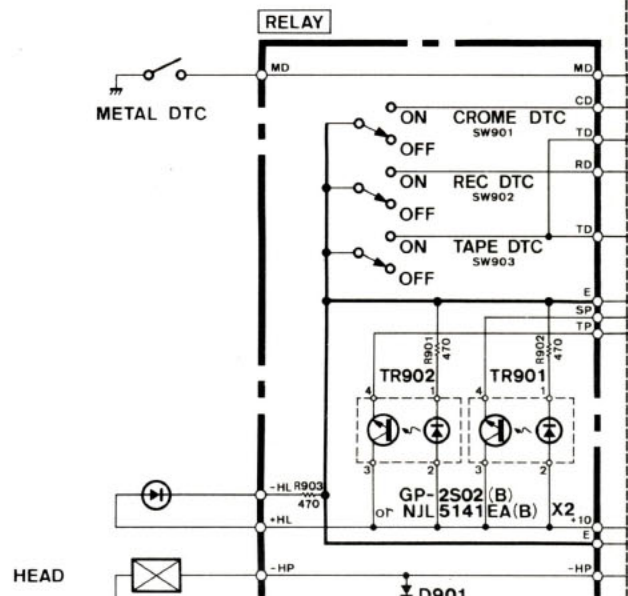
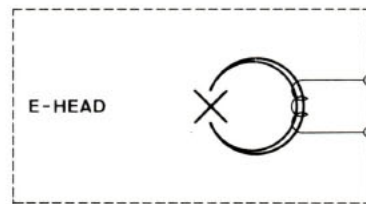
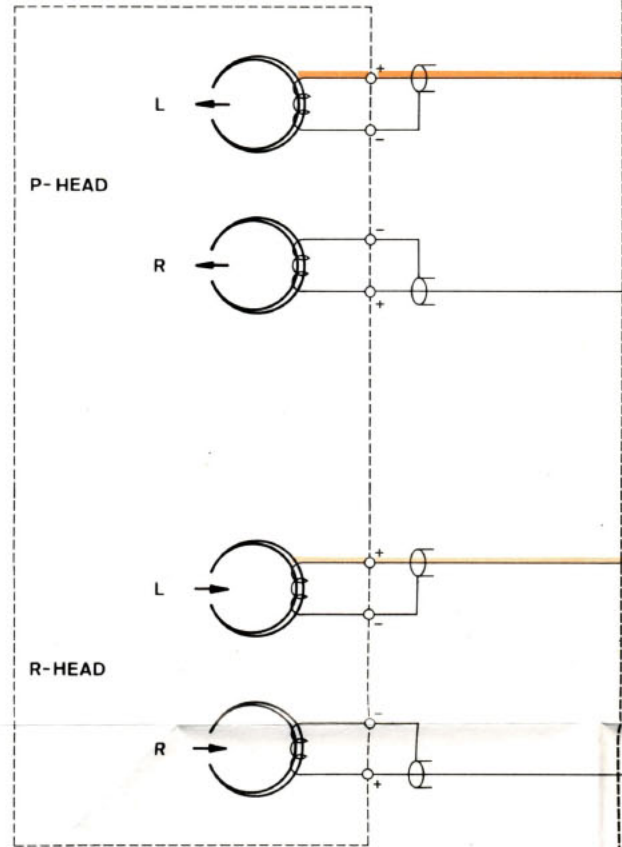
3

4

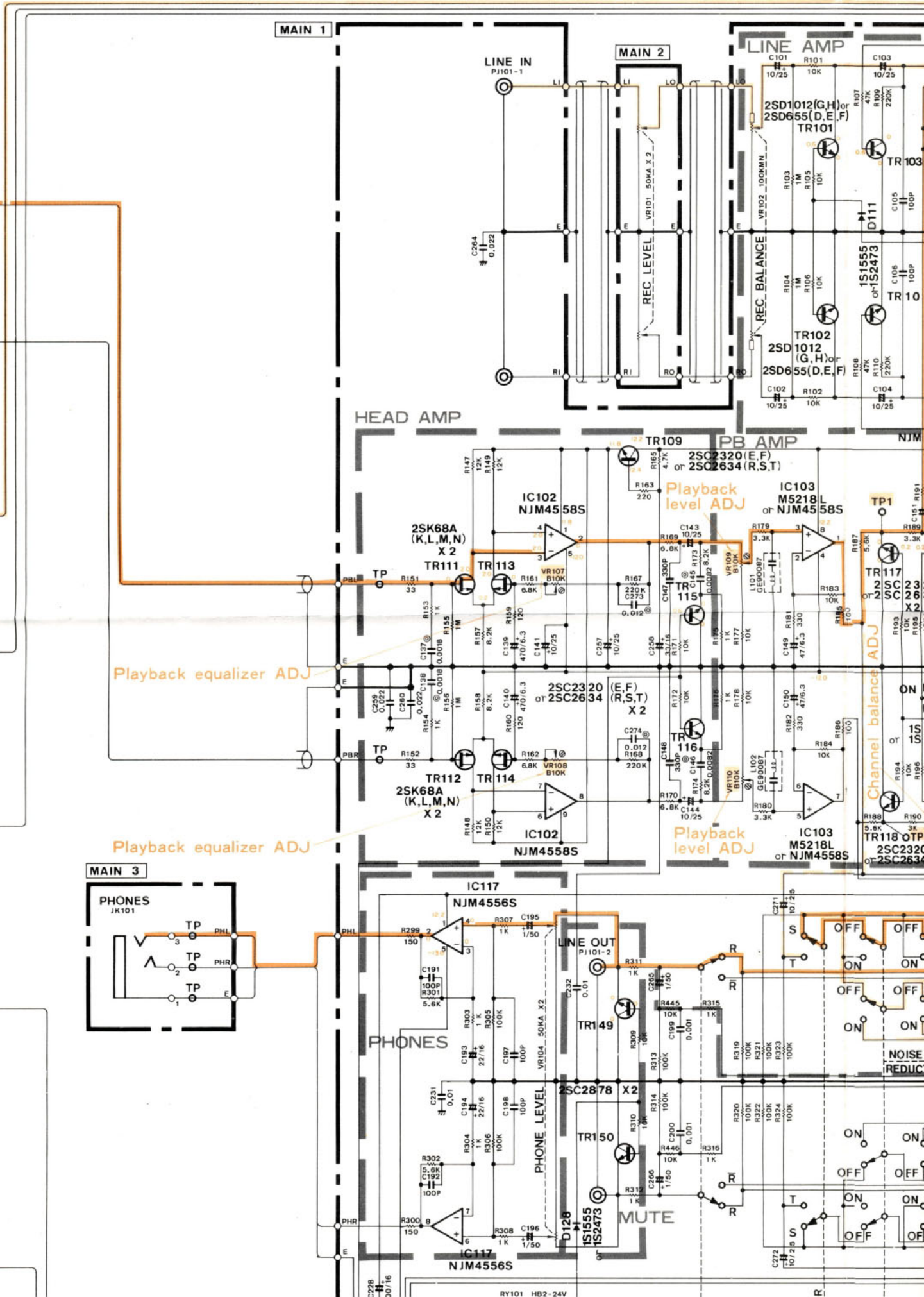
5

6

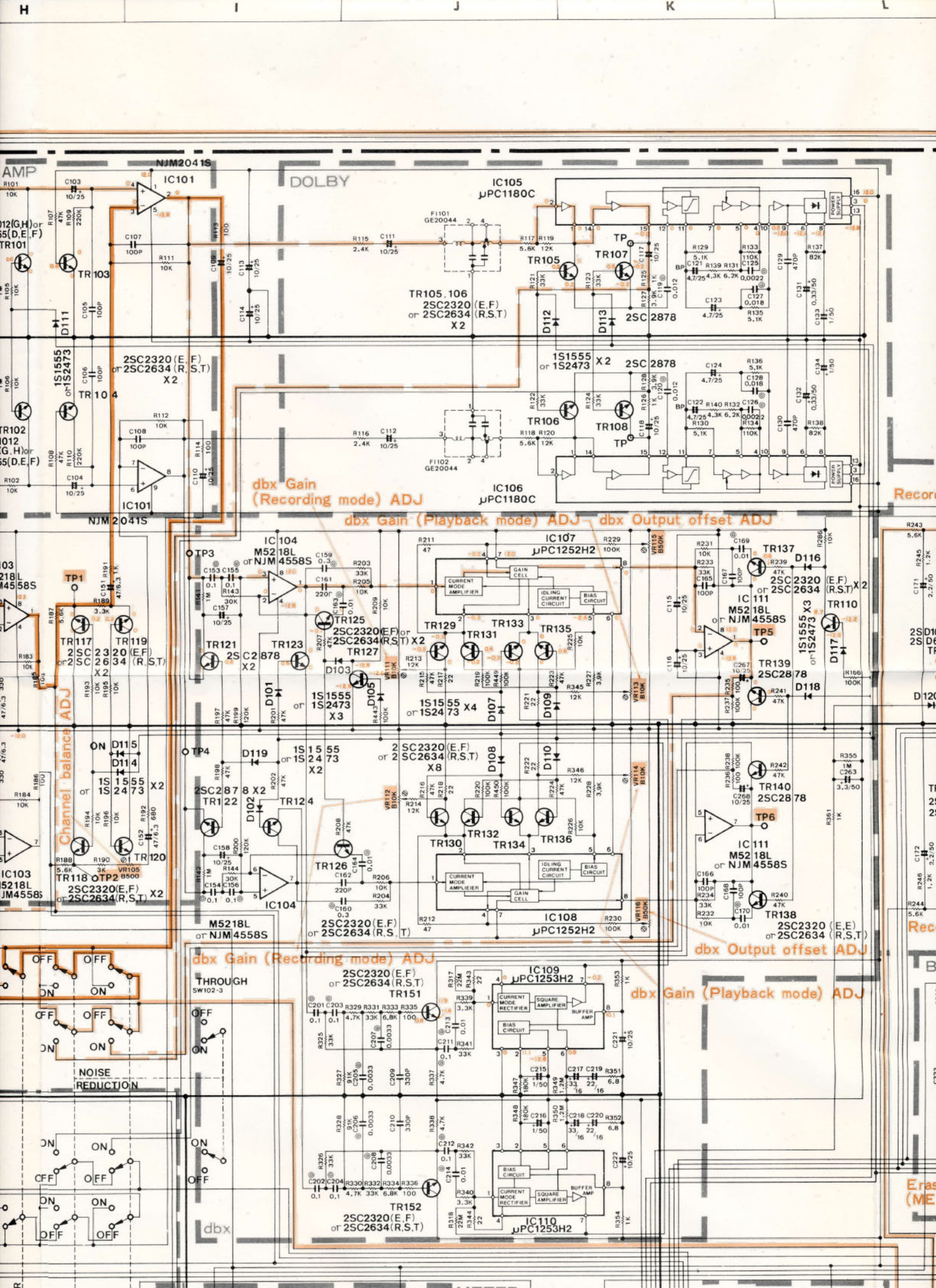
TM-6A(S)











DOLBY

dbx Gain (Recording mode) ADJ

dbx Gain (Playback mode) ADJ

dbx Output offset ADJ

Channel balance ADJ

dbx Gain (Recording mode) ADJ

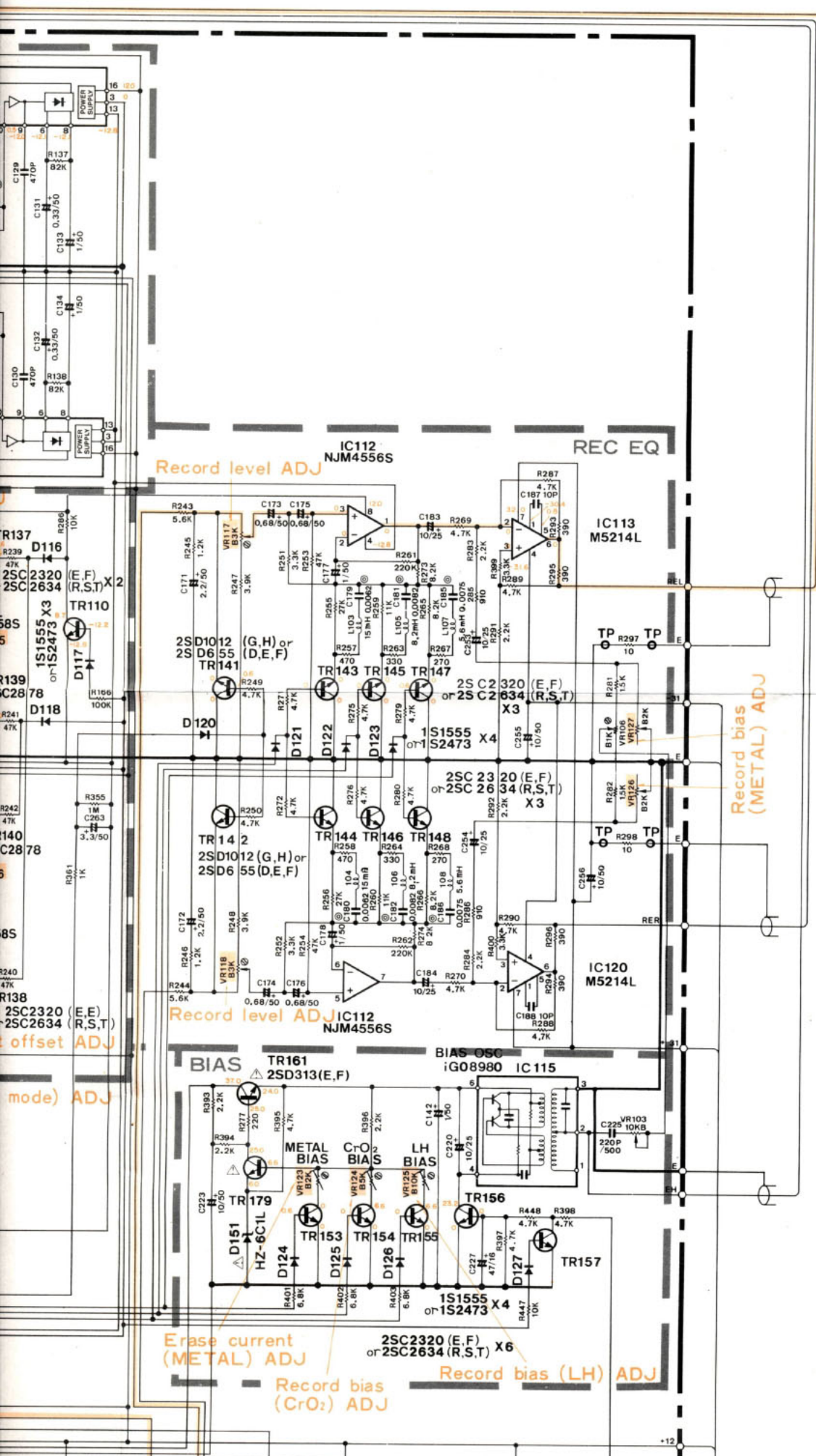
dbx Gain (Playback mode) ADJ

NOISE REDUCTION

dbx

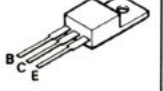
Erase (ME)

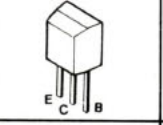


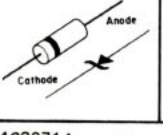


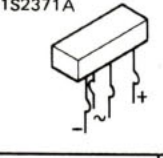
**PIN-CONNECTION TRANSISTORS, D**

- 2SC2320 (E, F)
- 2SC2634 (R, S, T)
- 2SC2878
- 2SA999 (E, F)
- 2SA1127 (R, ST)
- 2SD1153
- 2SB865
- 2SB598 (E, F)

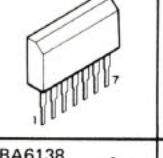
- 2SB507 (E, F)
  - 2SD313 (E, F)
  - 2SC1983
- 

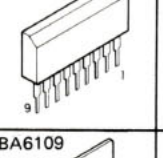
- 2SD665 (DEF)
  - 2SD1012 (G, H)
- 

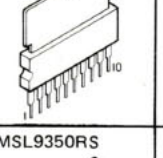
- HZ-6C1L
  - HZ-30-3L
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- 1S2371A
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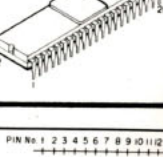
- SLR-34GC
  - SLR-34URC
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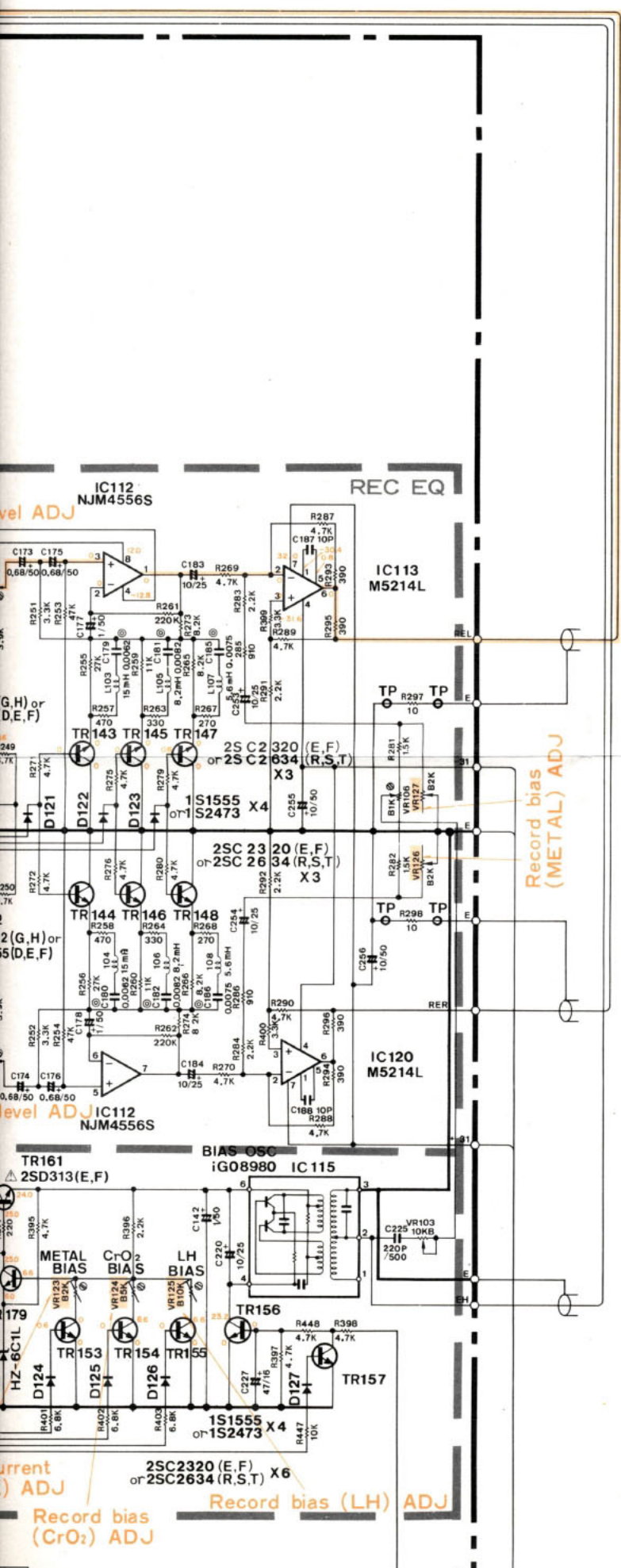
- M5214L
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- BA6138
- 

- BA6109
- 

- MSL9350RS
- 

- LA6402A-108
- 

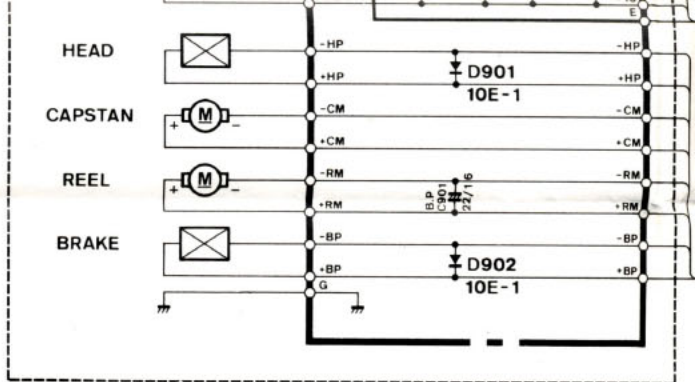


PIN-CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.

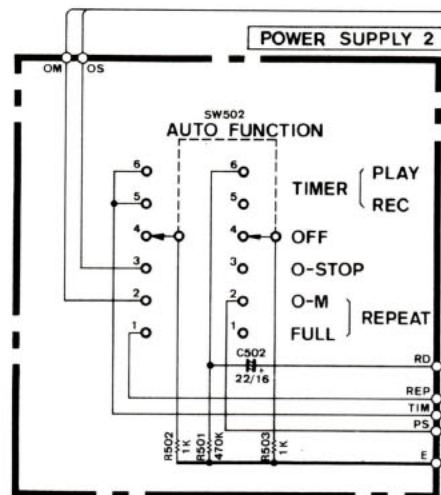
2SC2320 (E, F) 2SC2634 (R, S, T) 2SC2878 2SA999 (E, F) 2SA1127 (R, ST) 2SD1153 2SB865 2SB598 (E, F)	
2SB507 (E, F) 2SD313 (E, F) 2SC1983	
2SK68A (K, L, M, N)	
2SD665 (DEF) 2SD1012 (G, H)	
1S1555 1S2473	
HZ-6C1L HZ-30-3L	
10E-1	
1S2371A	
SLR-34GC SLR-34URC	
AN78M05 NJM78M051A AN78M10 NJM78M101A	
M5214L	
μPC1252Hz μPC1253Hz	
BA6138	
NJM2041S NJM4558S NJM4556S	
BA6109	
μPC1180C	
MSL9350RS	
μPD554C-083	
LA6402A-108	
BIAS OSC	



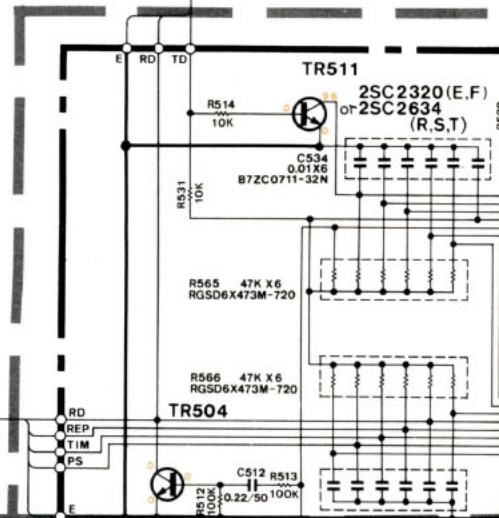
7



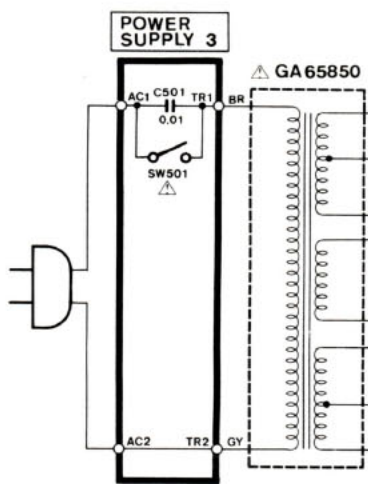
8



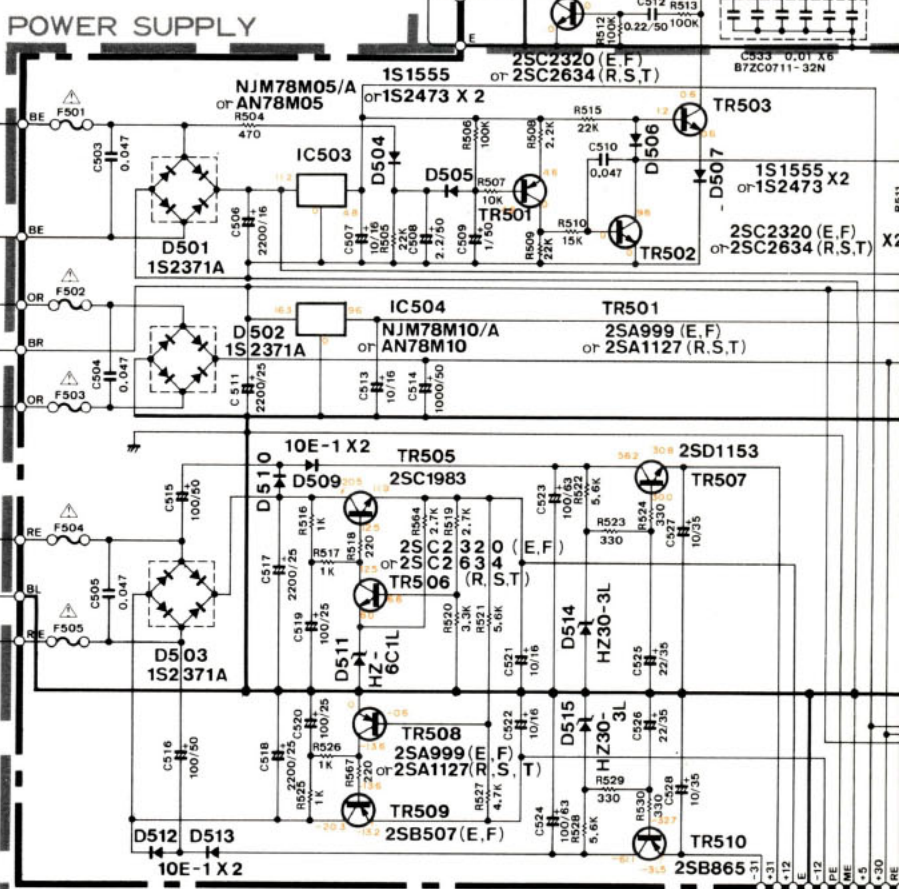
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10



11

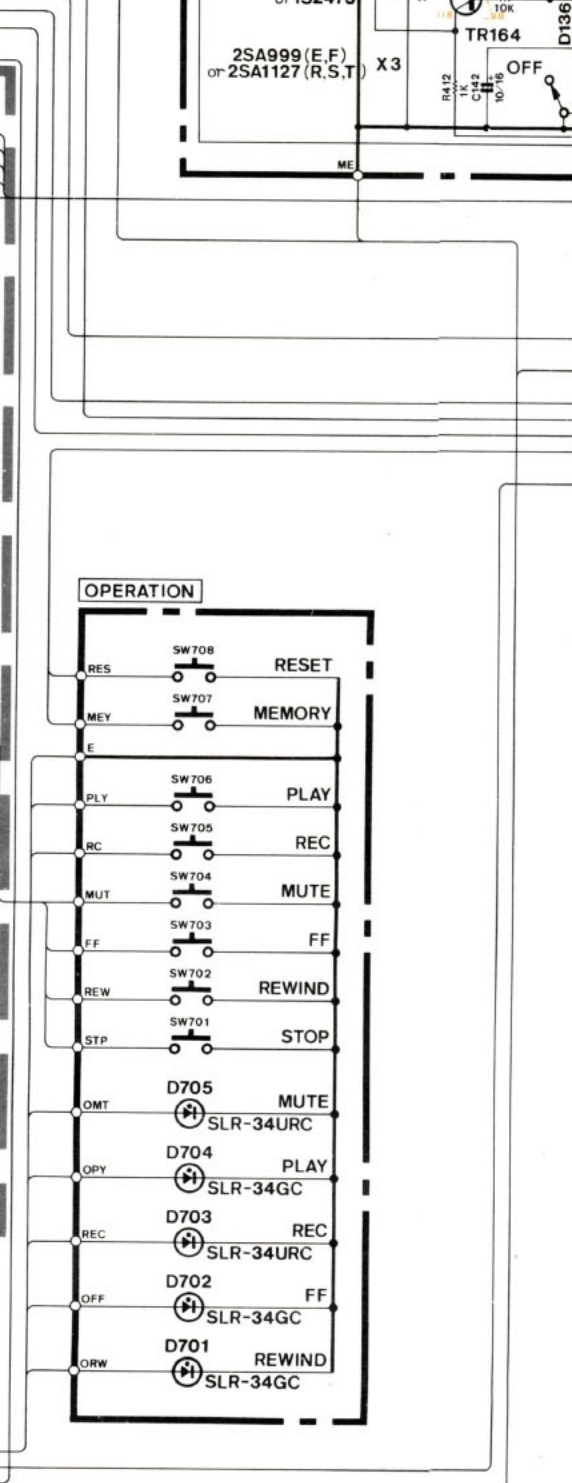
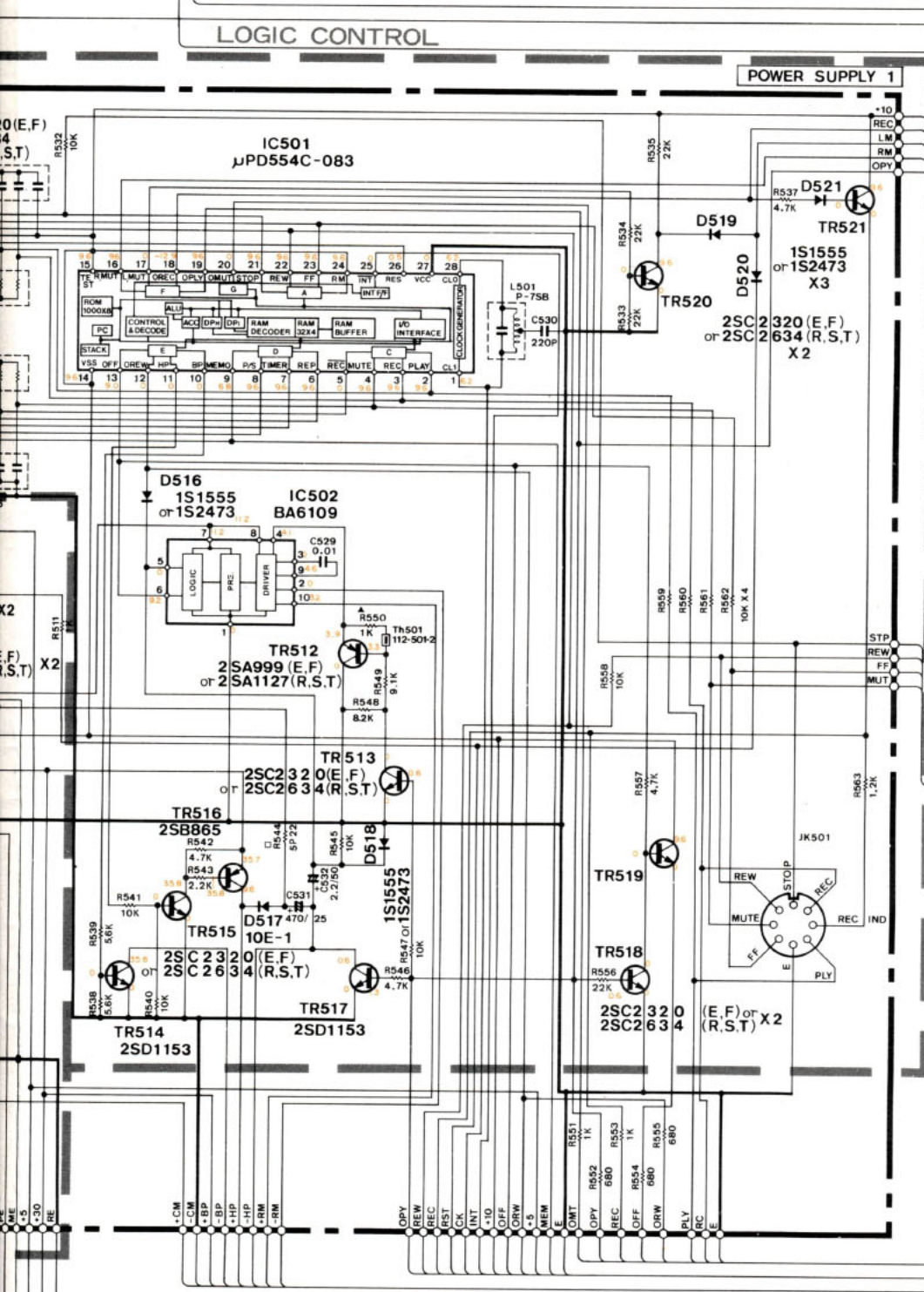
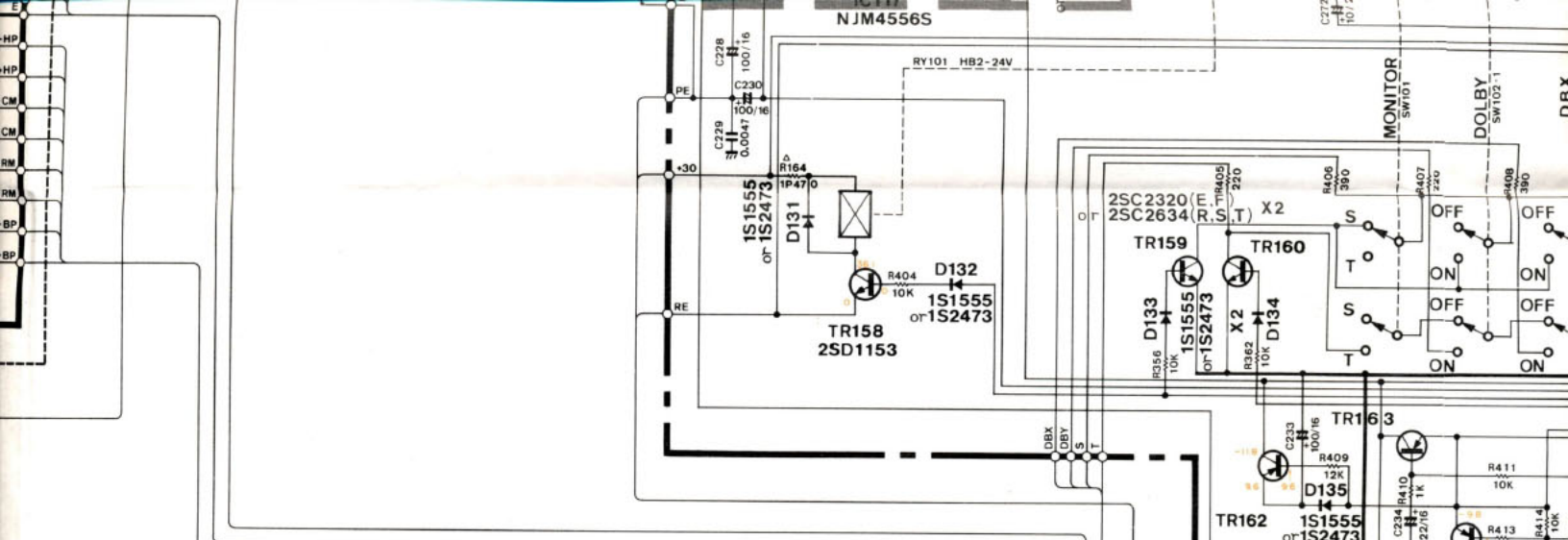


12

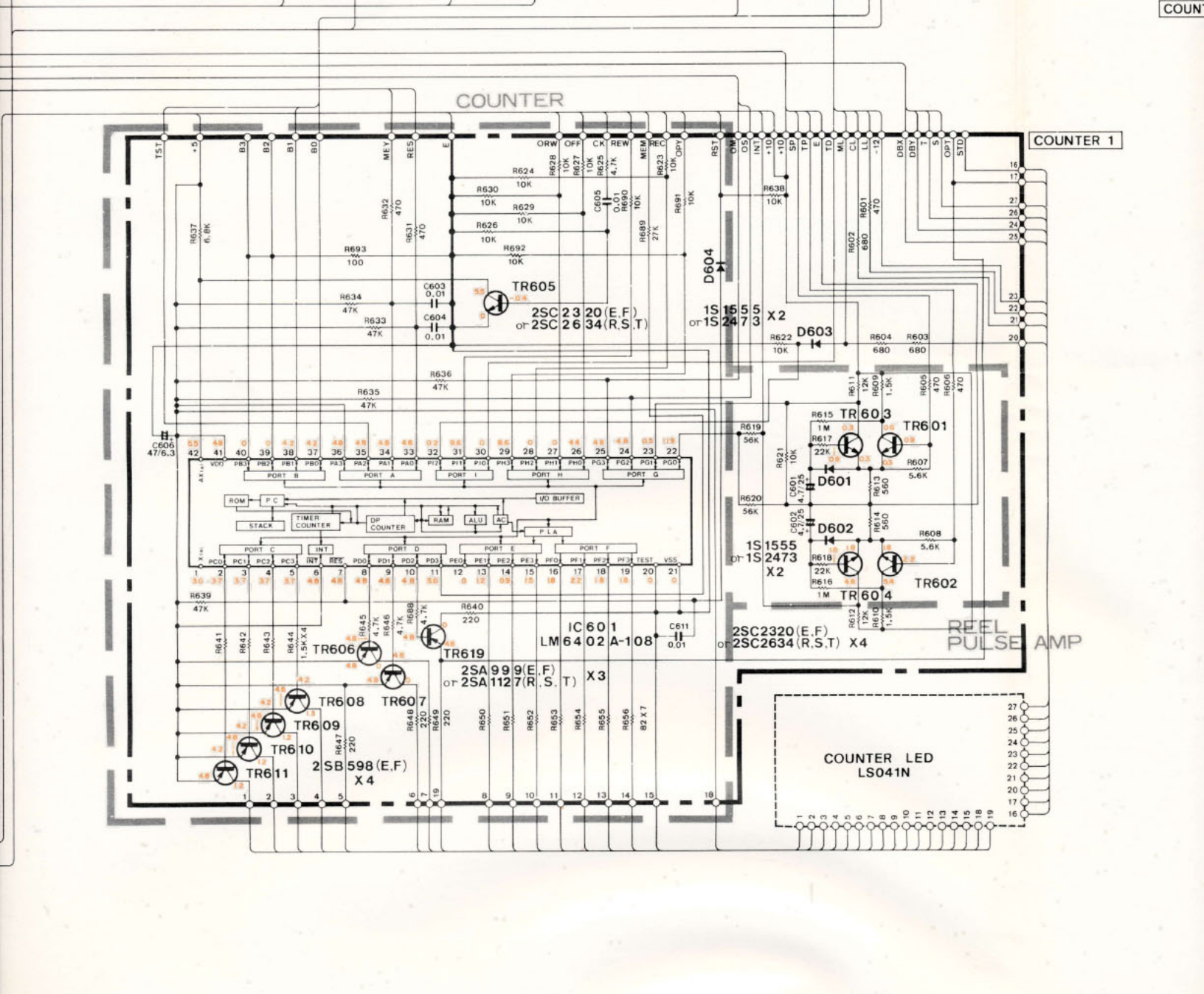
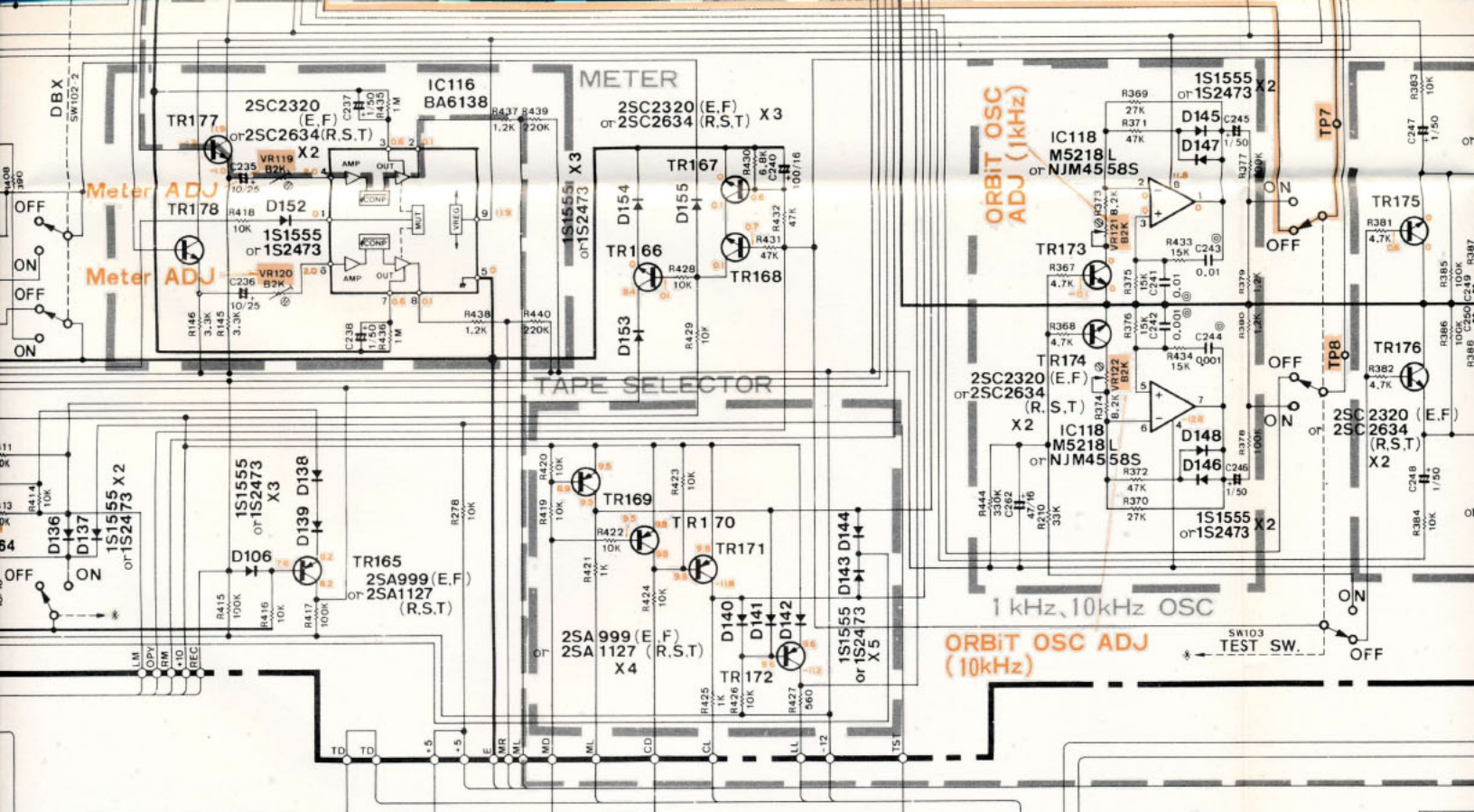
CAPACITOR	
REMARKS	PARTS NAME
NO MARK	CERAMIC CAPACITOR
⊙	POLYESTEL FILM CAPACITOR
NO MARK	ELECTROLYTIC CAPACITOR

RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR
△	METAL OXIDE FILM RESISTOR
⊙	SEMI VARIABLE RESISTOR







# PARTS LIST

## **K-1000** STEREO CASSETTE DECK

### ■ CONTENTS

EXPLODED VIEW (All-over) .....	1
PARTS LIST (All-over) .....	2/3
EXPLODED VIEW (Cassette Mechanism) .....	4
PARTS LIST (Cassette Mechanism) .....	5/6
EXPLODED VIEW (Panel Unit) .....	7
PARTS LIST (Panel Unit) .....	8
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U: U.S.A. model  
C: Canadian model  
A: Australian model  
G: European model  
B: British model  
R: General model

### ■WARNING

UL Standard 1270 requires that components marked  $\triangle$  be replaced with parts having specifications equal to those originally installed.

SINCE 1887



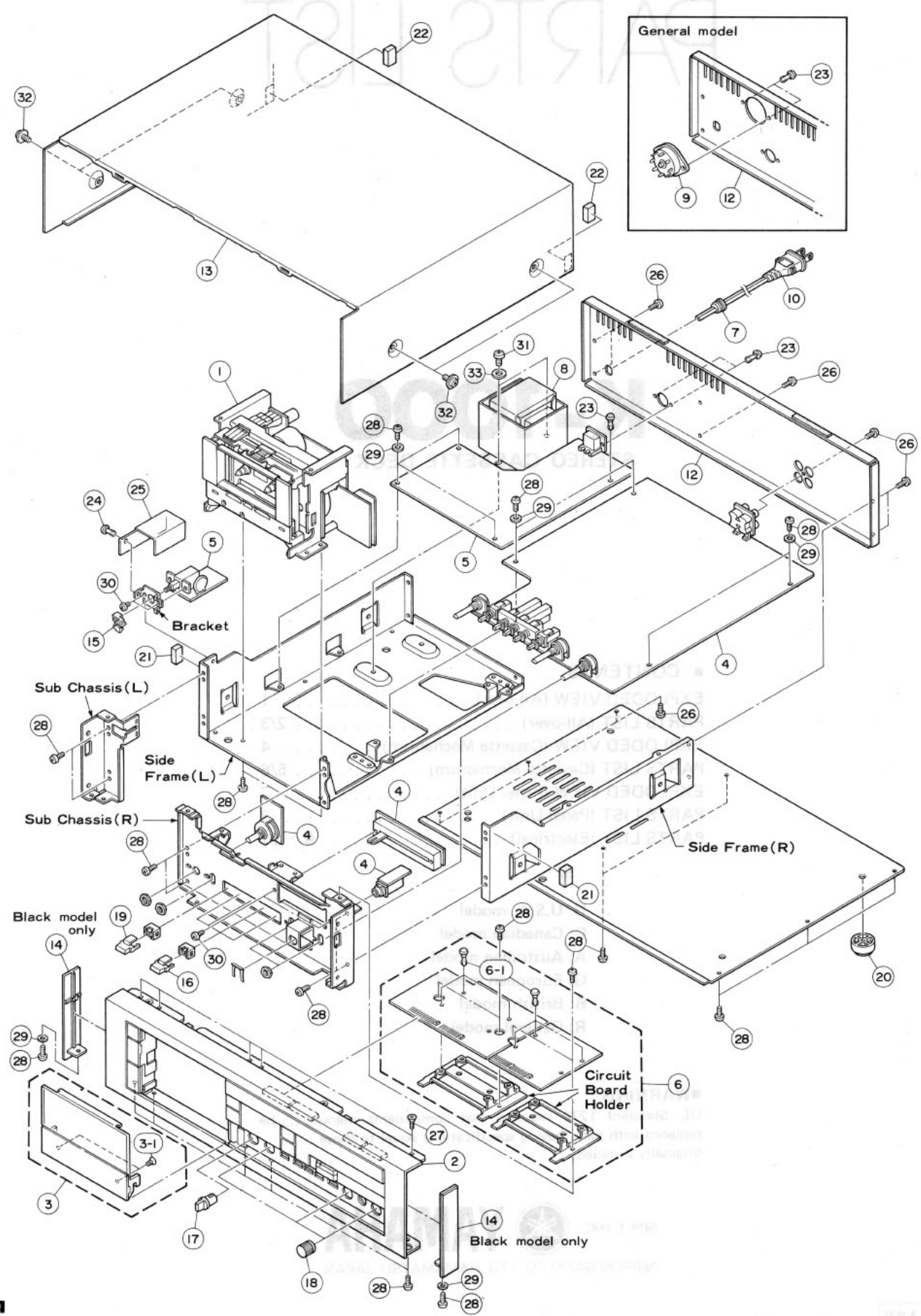
# YAMAHA

NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN

004488



# EXPLODED VIEW(All-over)



# ■ PARTS LIST(All-over)

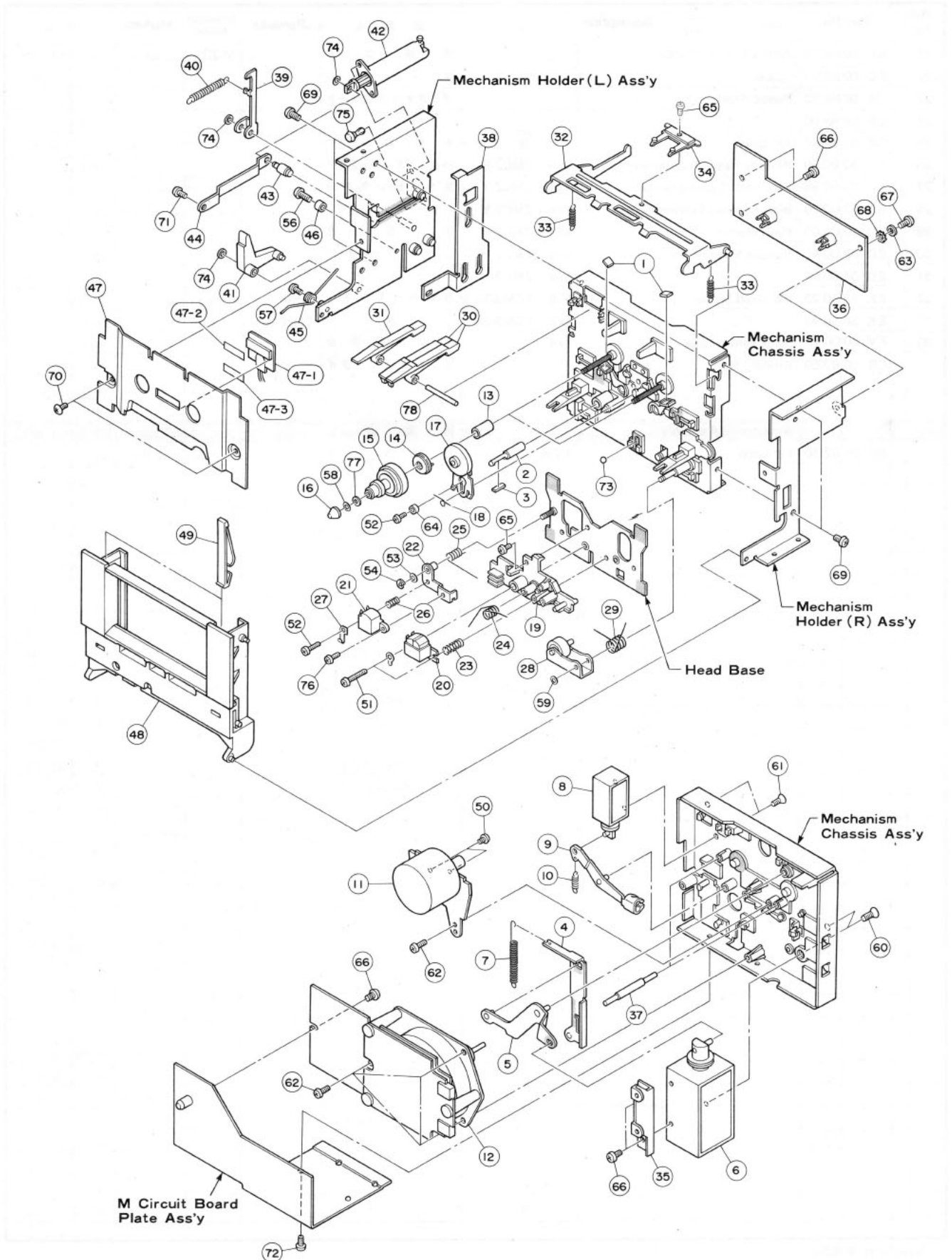
Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets		
※ 1	SM:60:15:00	TM-6A Mechanism Ass'y	Silver	TM-6A総組立				
※ "	SM:60:24:00	"	Black	"				
※ 2	NB:60:83:70	Panel Unit	Silver	パネルユニット				
※ "	NB:60:84:10	"	Black	"				
※ 3	NB:60:84:00	Cassette Lid Unit	Silver	カセット蓋ユニット				
※ "	NB:60:84:40	"	Black	"				
※ 3-1	EB:03:00:40	Flat Head Screw	3x4 ZMC2-Y	皿小ネジ				
※ 4	NA:08:00:00	Main Circuit Board	Silver	メインシート		J,R,A,G,B		
※ "	NA:08:00:10	"	"	"		U,C		
※ "	NA:08:00:20	"	Black	"		J,R,A,G,B		
※ "	NA:08:00:30	"	"	"		U,C		
※ 5	NA:08:00:80	Power Circuit Board		電源シート		J		
※ "	NA:08:00:90	"		"		U,C		
※ "	NA:08:01:00	"		"		G,B		
※ "	NA:08:07:80	"		"		R,A		
※ 6	NA:08:01:40	Counter Circuit Board		カウンターシート		J,R,A,G,B		
※ "	NA:08:02:00	"		"		U,C		
※ 6-1	CB:60:56:20	Plastic Rivet		プラスチックリベット				
※ 7	CB:61:68:10	Cord Stopper		コードストッパー		J,U,C		
※ "	CB:60:99:50	"	SR-5N-4	"		R,A,G,B		
※ 8	GA:65:83:00	Power Transformer		電源トランス		J		△
※ "	GA:65:85:00	"		"		U,C		△
※ "	GA:65:86:00	"		"		A,B		△
※ "	GA:65:87:00	"		"		G		△
※ "	GA:65:84:00	"		"		R		△
※ 9	LB:20:14:80	Voltage Selector		電圧切換器		R		
※ 10	MG:00:04:10	Power Cord	7A 125V 2.2m	電源コード	} Inter-changeable	J		
※ "	MG:00:12:70	"	7A 125V 2.2m	"		J		
※ "	MG:00:07:80	"	6A 250V 2m	"	} Inter-changeable	R		
※ "	MG:00:08:40	"	10A 125V 2m	"		U,C		
※ "	MG:00:12:40	"	10A 125V 2m	"		U,C		
※ "	MG:00:09:20	"	7.5A 250V 2.5m	"		A		
※ "	MG:00:09:50	"	2.5A 250V 2m	"		G		
※ "	MG:00:10:00	"	6A 300/500V 2m	"		B		
※ 11	AA:61:34:70	Bottom Cover		ボトムカバー				
※ 12	AA:61:34:80	Rear Panel		リアパネル		J		
※ "	AA:61:34:90	"		"		R		
※ "	AA:61:35:00	"		"		U,C		
※ "	AA:61:35:10	"		"		A		
※ "	AA:61:35:20	"		"		G		
※ "	AA:61:35:30	"		"		B		
※ 13	AA:61:35:40	Top Cover	Silver	トップカバー				
※ "	AA:61:35:50	"	Black	"				
※ 14	CB:61:39:90	Side Plate	Black	サイドプレート				
※ 15	CB:61:40:00	Rod		ロッド	POWER			
※ 16	CB:61:36:90	Push Button	Silver	プッシュボタン				
※ "	CB:61:37:00	"	Black	"				
※ 17	CB:61:37:10	Knob	Silver	ツマミ	AUTO FUNCTION			
※ "	CB:61:37:20	"	Black	"	"			
※ 18	CB:61:37:30	"	Silver	"	ORBIT REC BALANCE LEVEL			
※ "	CB:61:37:40	"	Black	"	"			
※ 19	CB:61:58:40	Push Button		プッシュボタン	TEST			
※ 20	CB:08:03:50	Leg		脚				




※ New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
21	CB 09:98:10	Anti-Vibration Rubber	防 振 ゴ ム		M-70	
22	CB 09:85:70	Spacer	ス ペ ー サ ー			
23	CB 06:88:80	Plastic Rivet	プ ラ ス チ ッ ク リ ベ ッ ト			
24	CB 09:96:00	"	"			
25	CB 61:84:50	AC Cover	A C カ バ ー			
26	Ei 33:00:86	Binding Head Tapping Screw	3x8 ZMC2-Bℓ	バ イ ン ド タ ッ ピ ン グ ネ ジ		
27	EO 03:00:86	Flat Head Tapping Screw	3x8 ZMC2-Y	皿 タ ッ ピ ン グ ネ ジ		
28	EN 03:00:20	Binding Head Tapping Screw	3x8 ZMC2-Y	バ イ ン ド タ ッ ピ ン グ ネ ジ		
29	EV 20:08:00	Plain Washer	φ8 ZMC2-Y	平 座 金		
30	ED 03:00:46	Binding Head Screw	3x4 ZMC2-Y	バ イ ン ド 小 ネ ジ		
31	ED 04:00:86	"	4x8 ZMC2-Y	"		
32	EK 13:50:20	BW Head Screw	4x8 FCM3-3g	B W ヘ ッ ド 小 ネ ジ	Silver	
"	EK 36:50:40	"	4x8 FCM3-Bℓ	"	Black	
33	EV 20:00:46	Sems Pain Washer	φ4	セ ム ス 平 座 金		
	CB 06:92:50	Binding Tie	インシュロックタイ			
		Accessories Assembly	付 属 品 Ass'y			
	Mi 06:62:10	Pin Cord	1.2m	ピ ン コ ー ド		

◆ New Parts (新規部品)

# EXPLODED VIEW(Cassette Mechanism)



4 In this figure, apply silicone grease to the parts printed   
apply diamond oil to the parts printed   
apply molypaste to the parts printed 

# ■PARTS LIST(Cassette Mechanism)

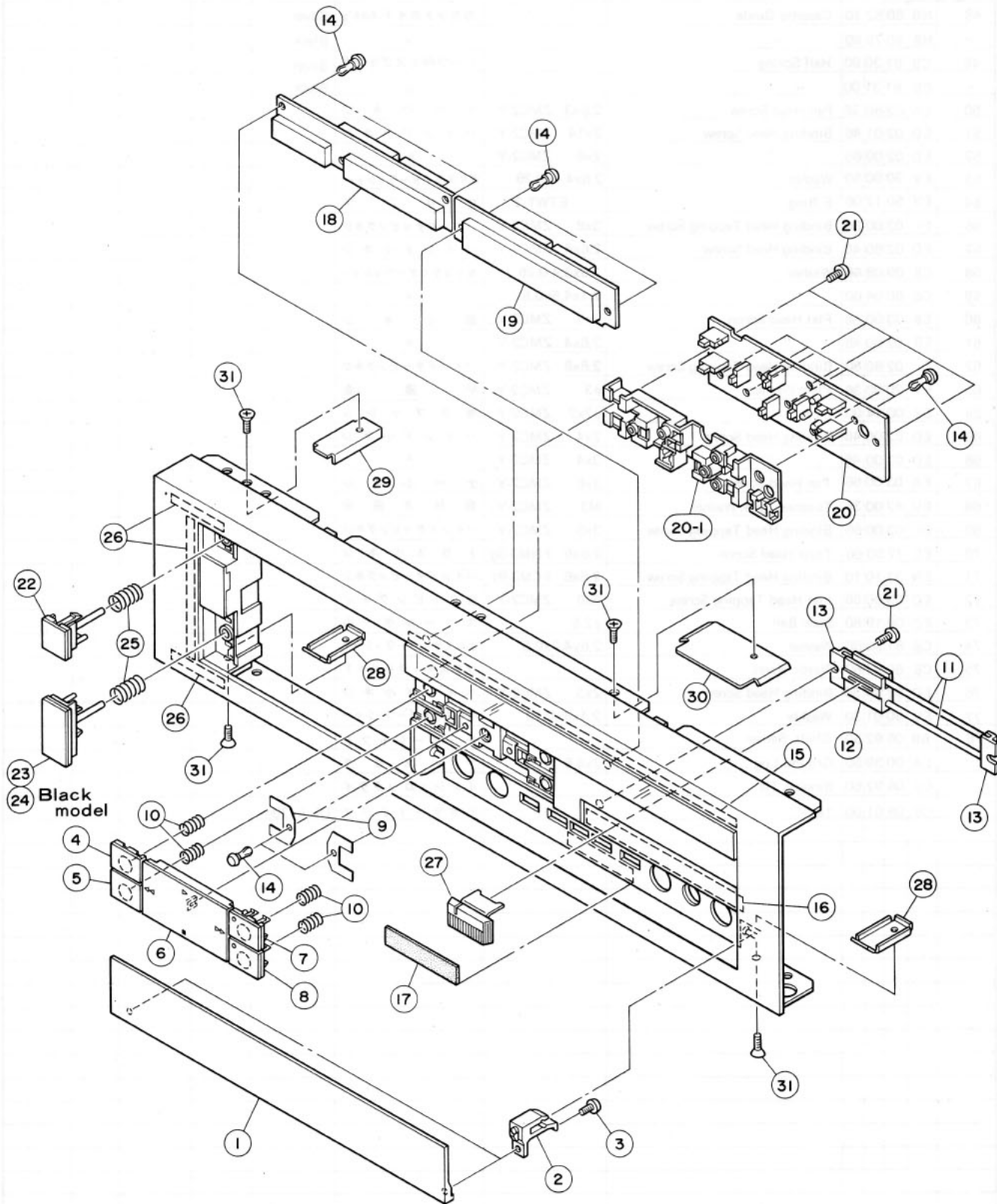
Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
	SM:60:15:00	Cassette Mechanism Ass'y	TM-6A	TM-6A総組立	Silver	
	SM:60:24:00	"		"	Black	
1	CC:01:67:80	Felt, Brake		ブレーキフェルト		
2	AA:61:09:80	Shaft, Erase Head Tension		E.Hテンションポスト		
3	CC:01:68:90	Felt, Erase Head Tension		E.Hテンションフェルト		
4	NB:60:51:80	Coupling Plate Ass'y		ベース連結板Ass'y		
5	NB:09:81:50	Link Ass'y		リンクAss'y		
6	JF:00:03:10	Solenoid, Base	TDS10E	ベースソレノイド		
7	AA:61:09:90	Return Spring		リターンスプリング		
8	JF:00:03:50	Solenoid, Brake	TDS07A	ブレーキソレノイド		
9	CB:60:94:80	Lever, Brake		ブレーキレバー		
10	AA:61:27:30	Brake Spring		ブレーキスプリング		
11	JC:00:07:40	Reel Motor	BFS-7B	リールモーター		
12	JC:00:08:10	D.D. Motor	MC-950G	D.Dモーター		
13	AA:61:10:00	BT Spring		BTスプリングL		
14	NB:09:81:80	BT Disk Ass'y		BTディスクAss'y		
15	NB:60:52:50	Reel Base Ass'y		リール台Ass'y		
16	CB:09:24:00	Reel Cap.		リールキャップ		
17	NB:60:51:90	Idler Ass'y		アイドラーAss'y		
18	AA:61:27:40	Idler Spring		アイドラーズプリング		
19	CB:61:53:40	Base		支柱台		
20	GF:00:02:20	REC/Playback Combination Head		録再コンビヘッド		
21	GF:00:02:60	Erase Head		消去ヘッド		
22	NB:60:52:30	Erase Head Arm Ass'y		消去ヘッドアームAss'y		
23	AA:60:45:10	Spring		アジマススプリング		
24	AA:61:10:50	"		ベース駆動スプリング		
25	AA:61:10:60	"		消却ヘッドスプリング		
26	AA:61:15:00	"		消却ヘッドアジマススプリング		
27	BB:07:01:30	Binding Plate		束線止メ		
28	NB:60:52:00	Pinch Roller Ass'y		ピンチローラーAss'y		
29	AA:61:10:10	Pinch Roller Spring		ピンチローラーズプリング		
30	CB:60:04:80	Lever, Sensor		センサーレバー		
31	CB:61:30:40	"		"		
32	NB:60:52:70	Holder Plate Ass'y		押え板Ass'y		
33	AA:61:10:20	Spring		押えスプリング		
34	NB:60:18:50	Metal Switch Ass'y		メタルスイッチAss'y	K-20	
35	AA:61:29:40	Bracket		基板ブラケット		
36	NA:07:87:50	Relay Circuit Board		中継シート		
37	CB:60:95:00	Acrylic Fiber		アクリルファイバー		
38	AA:61:28:40	Plate (Eject Operate)		イジェクト作動板		
39	AA:61:28:50	Lever, Lock		ロックレバー		
40	AA:61:29:30	Spring		ロックレバースプリング		
41	CB:61:30:50	Lever Eject		イジェクトレバー		
42	NB:60:78:70	Damper Ass'y		ダンパーAss'y		
43	BB:07:00:10	Shaft, Slide		スライド軸		
44	AA:61:28:60	Coupling Plate		イジェクト連結板		
45	AA:61:29:10	Spring		イジェクトスプリング		
46	CB:61:42:10	Stopper		ストッパー		
47	AA:61:28:90	Blind Plate Ass'y		ブラインドプレートAss'y	Silver	
"	AA:61:29:00	"		"	Black	
47-1	iF:00:35:70	LED		L E D		K-500
47-2	CB:07:41:90	Adhesive Tape		ダブルタックテープ		
47-3	CB:07:42:00	"		"		

\* New Parts (新規部品)





1 ■EXPLODED VIEW(Panel Unit)



# ■ PARTS LIST(Panel Unit)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets		
	NB 60:83:70	Panel Unit	Silver	パネルユニット				
	NB 60:84:10	"	Black	"				
1	BA 08:42:30	Siling Panel	Silver	シーリングパネル				
"	BA 08:42:40	"	Black	"				
2	CB 61:37:90	Hinge, Door	Silver	ドアーヒンジ				
"	CB 61:38:00	"	Black	"				
3	ED 03:00:50	Binding Head Screw	3x5 ZMC2-Y	バインド小ネジ				
4	NB 60:82:30	Button Ass'y	Silver	ボ タ ンAss'y	RESET			
"	NB 60:82:40	"	Black	"	"			
5	NB 60:82:50	"	Silver	"	MEMORY			
"	NB 60:82:60	"	Black	"	"			
6	NB 60:82:70	"	Silver	"	OPERATION			
"	NB 60:82:80	"	Black	"	"			
7	NB 60:82:90	"	Silver	"	REC/PAUSE			
"	NB 60:83:00	"	Black	"	"			
8	NB 60:83:10	"	Silver	"	MUTE			
"	NB 60:83:20	"	Black	"	"			
9	AA 61:37:00	Leaf Spring		リーフスプリング	OPERATION			
10	AA 61:36:80	Spring	φ6	ス プ リ ン グ				
11	AA 61:36:70	Slide Shaft		スライドシャフト				
12	CB 61:38:10	Slider		ス ラ イ ダ ー				
13	CB 61:38:20	Shaft Holder		シャフトホルダー				
14	CB 60:88:10	Plastic Rivet		プラスチックリベット				
15	CB 07:41:90	Adhesive Tape		ダブルタックテープ				
16	CB 07:42:00	"		"				
17	CB 61:71:10	Anti-Vibration Rubber		防 振 ゴ ム				
18	NA 08:05:60	Indication LED	1LS041-1	インジケーションLED				
19	NA 08:06:00	LED Meter	SLS032-S	L E D メ ー タ ー	Silver			
"	NA 08:06:10	"	BLS032-B	"	Black			
20	NA 08:01:60	Operation Circuit Board		オペレーションシート				
20-1	CB 61:36:50	Holder		ホ ル ダ ー	OPERATION			
21	EN 03:00:20	Binding Head Tapping Screw	3x8 ZMC2-Y	バインドタッピングネジ				
22	NB 60:81:90	Button Ass'y	Silver	ボ タ ンAss'y	POWER			
"	NB 60:82:00	"	Black	"	"			
23	NB 60:82:10	"	Silver	"	EJECT			
24	NB 60:82:20	"	Black	"	"			
25	AA 61:36:90	Spring	φ8	ス プ リ ン グ				
26	CB 61:57:80	Adhesive Tape		ダブルタックテープ				
27	NB 60:83:50	Slide Knob Ass'y	Silver	スライドツマミAss'y	REC LEVEL			
"	NB 60:83:60	"	Black	"	"			
28	AA 61:37:10	Clamp A		ク ラ ン プ A				
29	AA 61:37:20	Clamp B		ク ラ ン プ B				
30	AA 61:37:30	Clamp C		ク ラ ン プ C				
31	EN 39:00:46	Flat Head Tapping Screw	3x8 ZMC2-BR	皿タッピングネジ				

\* New Parts (新規部品)

## PARTS LIST(Electrical)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
* NA:08:00:80	NA:08:00:80	Power Supply C. Board	電 源 シ ー ト			J
* NA:08:00:90	NA:08:00:90	"	"			U, C
* NA:08:01:00	NA:08:01:00	"	"			G, B
* NA:08:07:80	NA:08:07:80	"	"			R, A
C501	Fi 40:41:00	Ceramic Cap.	0.01 $\mu$ F AC250V (D, E)	セラコン		J
* "	Fi 41:41:00	"	0.01 $\mu$ F VA-1	"		R,U,A,G,C
C502	UW:93:72:20	Electrolytic Cap.	22 $\mu$ F 16V	ケミコン		
C503 ~ C506	FG 44:44:70	Ceramic Cap.	0.047 $\mu$ F 50V	セラコン		
C506	UW:83:92:20	Electrolytic Cap.	2200 $\mu$ F 16V	ケミコン		
C507	UW:93:71:00	"	10 $\mu$ F 16V	"		
C508	UW:96:62:20	"	2.2 $\mu$ F 50V	"		
C509	UW:96:61:00	"	1 $\mu$ F 50V	"		
C510	FG 44:44:70	Ceramic Cap.	0.047 $\mu$ F 50V	セラコン		
C511	UW:54:92:20	Electrolytic Cap.	2200 $\mu$ F 25V	ケミコン		
C512	UW:56:52:20	"	0.22 $\mu$ F 50V	"		
C513	UW:93:71:00	"	10 $\mu$ F 16V	"		
C514	UW:86:91:00	"	1,000 $\mu$ F 50V	"		
C515 C516	UW:86:81:00	"	100 $\mu$ F 50V	"		
C517 C518	UW:54:92:20	"	2,200 $\mu$ F 25V	"		
C519 C520	UW:94:81:00	"	100 $\mu$ F 25V	"		
C521 C522	UW:93:71:00	"	10 $\mu$ F 16V	"		
C523 C524	UW:67:81:00	"	100 $\mu$ F 63V	"		
C525 C526	UW:85:72:20	"	22 $\mu$ F 35V	"		
C527 C528	UW:95:71:00	"	10 $\mu$ F 35V	"		
C529	FG 44:41:00	Ceramic Cap.	0.01 $\mu$ F 50V	セラコン		
C530	FG 41:22:20	"	220 $\mu$ F 50V	"		
C531	UW:84:84:70	Electrolytic Cap.	470 $\mu$ F 25V	ケミコン		
C532	UW:96:62:20	"	2.2 $\mu$ F 50V	"		
* C533 C534	FZ 00:35:70	Capacitor Array	0.01 $\mu$ F x 6	コンデンサアレイ		
* L501	GE 90:08:90	OSC Coil		発 振 コ イ ル		
R501	HJ 35:84:70	Carbon Resistor	470k $\Omega$ RD25S	カ ー ボ ン 抵 抗		
R502 R503	HJ 35:61:00	"	1k $\Omega$ "	"		
R504	HJ 35:54:70	"	470 $\Omega$ "	"		
R505	HJ 35:72:20	"	22k $\Omega$ "	"		
R506	HJ 35:81:00	"	100k $\Omega$ "	"		
R507	HJ 35:71:00	"	10k $\Omega$ "	"		
R508	HJ 35:62:20	"	2.2k $\Omega$ "	"		
R509	HJ 35:72:20	"	22k $\Omega$ "	"		
R510	HJ 35:71:50	"	15k $\Omega$ "	"		
R511	HJ 35:61:00	"	1k $\Omega$ "	"		
R512 R513	HJ 35:81:00	"	22k $\Omega$ "	"		
R514	HJ 35:71:00	"	10k $\Omega$ "	"		
R515	HJ 35:72:20	"	22k $\Omega$ "	"		
R516 R517	HJ 35:61:00	"	1k $\Omega$ "	"		
R518	HJ 35:52:20	"	220 $\Omega$ "	"		
R519	HJ 35:62:70	"	2.7k $\Omega$ "	"		
R520	HJ 35:63:30	"	3.3k $\Omega$ "	"		
R521 R522	HJ 35:65:60	"	5.6k $\Omega$ "	"		
R523 R524	HJ 35:53:30	"	330 $\Omega$ "	"		
R525 R526	HJ 35:61:00	"	1k $\Omega$ "	"		
R527	HJ 35:64:70	"	4.7k $\Omega$ "	"		
R528	HJ 35:65:60	"	5.6k $\Omega$ "	"		

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets		
R529 R530	HJ 35:53:30	Carbon Resistor	330Ω RD25S	カーボン抵抗				
R531 R532	HJ 35:71:00	"	10kΩ "	"				
R533 ~535	HJ 35:72:20	"	22kΩ "	"				
R537	HJ 35:64:70	"	4.7kΩ "	"				
R538 R539	HJ 35:65:60	"	5.6kΩ "	"				
R540 R541	HJ 35:71:00	"	10kΩ "	"				
R542	HJ 35:64:70	"	4.7kΩ "	"				
R543	HJ 35:62:20	"	2.2kΩ "	"				
R544	HM 55:42:20	Cement Molded Resistor	22Ω 5P	セメント抵抗				
R545	HJ 35:71:00	Carbon Resistor	10kΩ RD25S	カーボン抵抗				
R546	HJ 35:64:70	"	4.7kΩ "	"				
R547	HJ 35:71:00	"	10kΩ "	"				
R548	HJ 35:68:20	"	8.2kΩ "	"				
R549	HK 56:69:10	"	9.1kΩ "	"				
R550	HU 07:61:00	Matal Film Resistor	1kΩ RE35	金属披膜抵抗				
R551	HJ 35:61:00	Carbon Resistor	1kΩ RD25S	カーボン抵抗				
R552	HJ 35:56:80	"	680Ω "	"				
R553	HJ 35:61:00	"	1kΩ "	"				
R554 R555	HJ 35:56:80	"	680Ω "	"				
R556	HJ 35:72:20	"	22kΩ "	"				
R557	HJ 35:64:70	"	4.7kΩ "	"				
R558 ~562	HJ 35:71:00	"	10kΩ "	"				
R563	HJ 35:61:20	"	1.2kΩ "	"				
R564	HJ 35:62:70	"	2.7kΩ "	"				
R565 R566	HZ 00:25:80	Resistor Net Work	47kΩ x 6	抵抗ネットワーク				
R567	HJ 35:52:20	Carbon Resistor	220Ω RD25S	カーボン抵抗				
* Th501	HZ 00:28:90	Thermistor	112-501-2	サーミスタ				
TR501	iA 09:99:10	Transistor	2SA999 (E,F)	トランジスタ	Inter-changeable			
"	iA 11:27:00	"	2SA1127 (R,S,T)	"				
TR502 ~504	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable			
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				
TR505	iC 19:83:00	"	2SC1983	"				
TR506	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable			
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				
* TR507	iD 11:53:00	"	2SD1153	"				
TR508	iA 09:99:10	"	2SA999 (E,F)	"	Inter-changeable			
"	iA 11:27:00	"	2SA1127 (R,S,T)	"				
TR509	iB 05:07:00	"	2SB507 (E,F)	"				
* TR510	iB 08:65:00	"	2SB865	"				
TR511	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable			
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				
TR512	iA 09:99:10	"	2SA999 (E,F)	"	Inter-changeable			
"	iA 11:27:00	"	2SA1127 (R,S,T)	"				
TR513	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable			
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				
* TR514	iD 11:53:00	"	2SD1153	"				
TR515	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable			
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				
* TR516	iB 08:65:00	"	2SB856	"				
* TR517	iD 11:53:00	"	2SD1153	"				
TR518 ~521	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable			
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				

\* New Parts (新規部品)



Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets		
D501 ~503	iH 00:09:70	Diode Bridge	IS2371A	ダイオードブリッジ				
D504 ~507	iF 00:00:40	Diode	IS1555	ダイオード	Inter-changeable			
"	iF 00:06:70	"	IS2473	"				
D509 D510	iH 00:05:90	"	IOE-1	"				
D511	iF 00:15:10	Zener Diode	HZ-6CIL	ツェナーダイオード				
D512 D513	iH 00:05:90	Diode	IOE-1	ダイオード				
* D514 D515	iF 00:41:80	Zener Diode	HZ30-3L	ツェナーダイオード				
D516	iF 00:00:40	Diode	IS1555	ダイオード	Inter-changeable			
"	iF 00:06:70	"	IS2473	"				
D517	iH 00:05:90	"	IOE-1	"				
D518 ~521	iF 00:00:40	"	IS1555	"	Inter-changeable			
"	iF 00:06:70	"	IS2473	"				
* IC501	iG 07:50:00	IC	μPD554C-083	I C				
* IC502	iG 07:40:00	"	BA6109	"				
* IC503	iG 07:53:00	"	AN78M05	"	Inter-changeable			
"	iG 07:56:00	"	NJM78M05/A	"				
* IC504	iG 07:54:00	"	AN78M10	"	Inter-changeable			
"	iG 07:57:00	"	NJM78M10/A	"				
* SW501	KA 80:32:90	Power Switch	SDLC-1P	パワースイッチ				△
* SW502	KA 50:17:80	Rotary Switch	L=20 2-6	ロータリースイッチ	AUTO FUNCTION			
F501	KB 00:03:40	Fuse	T1.5A 250V	ヒューズ		J,R,A		△
"	KB 00:07:40	"	T1.6A 250V	"		G,B		△
"	KB 00:27:10	"	1.5A 250V	"		U,C		△
* F502 F503	KB 00:03:50	"	T2A 250V	"		J,R,A		△
"	KB 00:07:50	"	T2A 250V	"		G,B		△
"	KB 00:12:40	"	2A 250V	"		U,C		△
F504 F505	KB 00:03:10	"	T0.5A 250V	"		J,R,A		△
"	KB 00:06:60	"	T400mA 250V	"		G,B		△
"	KB 00:11:50	"	0.5A 250V	"		U,C		△
* JK501	LB 60:50:30	DIN Jack	8P 12.5 BL	D I N ジャック				
	LA 00:21:40	Wrapping Terminal	P=10 2P i-Type	i型ラッピング端子板				
	LB 20:18:80	Fuse Holder Pin	PC-FH1	ヒューズホルダーピン				
	LB 91:20:30	Short Plug	3P i-Type	ショートプラグ				
	LB 91:20:40	"	4P i-Type	"				
	LB 91:20:50	"	5P i-Type	"				
* AA 61:35:60		Bracket, Switch		スイッチブラケット				
* BA 08:39:90		Heat Sink	#8399	放 熱 板				
* BA 08:40:00		"	#8400	"				
BA 06:77:80		"	#6778	放 熱 器				
BB 06:62:90		Ground Washer	#6629	アースワッシャー				
Ei 03:00:60		Bind Head Tapping Screw	3x6 ZMC <sub>2</sub> -Y	バインドタッピングネジ				
ED 03:00:40		Bind Head Screw	3x4 ZMC <sub>2</sub> -Y	バインド小ネジ				

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
* NA 08 00:00	NA 08 00:00	Main Circuit Board	メ イ ン シ ー ト	Silver		J,R,A,G,B
* NA 08 00:10	NA 08 00:10	"	"	"		U,C
* NA 08 00:20	NA 08 00:20	"	"	Black		J,R,A,G,B
* NA 08 00:30	NA 08 00:30	"	"	"		U,C
C101 ~104	UW 94 71:00	Electrolytic Cap.	10 $\mu$ F 25V	ケ ミ コ ン		
C105 ~108	FG 41 21:00	Ceramic Cap.	100pF 50V	セ ラ コ ン		
C109 ~113	UW 94 71:00	Electrolytic Cap.	10 $\mu$ F 25V	ケ ミ コ ン		
C119 C120	UA 25 41:20	Mylar Cap.	0.012 $\mu$ F 50V	マ イ ラ ー コ ン		
C121 C122	UK 14 64:70	Electrolytic Cap.	4.7 $\mu$ F 25V	Ｂ Ｐ コ ン		
C123 C124	UW 94 64:70	"	4.7 $\mu$ F 25V	ケ ミ コ ン		
C125 C126	UA 25 32:20	Mylar Cap.	0.0022 $\mu$ F 50V	マ イ ラ ー コ ン		
C127 C128	UA 25 41:80	"	0.018 $\mu$ F 50V	"		
C129 C130	FG 41 24:70	Ceramic Cap.	470pF 50V	セ ラ コ ン		
C131 C132	UW 56 53:30	Electrolytic Cap.	0.33 $\mu$ F 50V	ケ ミ コ ン		
C133 C134	UW 96 61:00	"	1 $\mu$ F 50V	"		
C135 C136	UW 94 64:70	"	4.7 $\mu$ F 25V	"		
C137 C138	UA 25 31:80	Mylar Cap.	0.0018 $\mu$ F 50V	マ イ ラ ー コ ン		
C139 C140	UW 91 84:70	Electrolytic Cap.	470 $\mu$ F 6.3V	ケ ミ コ ン		
C141	UW 94 71:00	"	10 $\mu$ F 25V	"		
C142	UW 93 71:00	"	10 $\mu$ F 16V	"		
C143 C144	UW 94 71:00	"	10 $\mu$ F 25V	"		
C145 C146	UA 25 38:20	Mylar Cap.	0.0082 $\mu$ F 50V	マ イ ラ ー コ ン		
C147 C148	FG 41 23:30	Ceramic Cap.	330pF 50V	セ ラ コ ン		
C149 ~152	UW 91 74:70	Electrolytic Cap.	47 $\mu$ F 6.3V	ケ ミ コ ン		
C153 ~156	UA 25 51:00	Mylar Cap.	0.1 $\mu$ F 50V	マ イ ラ ー コ ン		
C157 C158	UW 94 71:00	Electrolytic Cap.	10 $\mu$ F 25V	ケ ミ コ ン		
C159 C160	UA 25 53:00	Mylar Cap.	0.3 $\mu$ F 50V	マ イ ラ ー コ ン		
* C161 C162	FT 55 22:00	Polypropylene Cap.	200p 50V	ポ リ プ ロ コ ン		
C163 C164	UA 25 41:00	Mylar Cap.	0.01 $\mu$ F 50V	マ イ ラ ー コ ン		
C165 ~168	FG 41 21:00	Ceramic Cap.	100pF 50V	セ ラ コ ン		
C169 C170	UA 25 41:00	Mylar Cap.	0.01 $\mu$ F 50V	マ イ ラ ー コ ン		
C171 C172	UW 96 62:20	Electrolytic Cap.	2.2 $\mu$ F 50V	ケ ミ コ ン		
C173 ~176	UW 56 56:80	"	0.68 $\mu$ F 50V	"		
C177 C178	UW 96 61:00	"	1 $\mu$ F 50V	"		
C179 C180	FA 15 36:20	Mylar Cap.	0.0062 $\mu$ F 50V	マ イ ラ ー コ ン		
C181 C182	UA 25 38:20	"	0.0082 $\mu$ F 50V	"		
C183 C184	UW 94 71:00	Electrolytic Cap.	10 $\mu$ F 25V	ケ ミ コ ン		
C185 C186	UA 25 37:50	Mylar Cap.	0.0075 $\mu$ F 50V	マ イ ラ ー コ ン		
C187 C188	FG 41 11:00	Ceramic Cap.	10pF 50V	セ ラ コ ン		
C191 C192	FG 41 21:00	"	100pF 50V	"		
C193 C194	UW 93 72:20	Electrolytic Cap.	22 $\mu$ F 16V	ケ ミ コ ン		
C195 C196	UW 96 61:00	"	1 $\mu$ F 50V	"		
C197 C198	FG 41 21:00	Ceramic Cap.	100pF 50V	セ ラ コ ン		
C199 C200	FG 41 31:00	"	0.001 $\mu$ F 50V	"		
C201 ~204	UA 25 51:00	Mylar Cap.	0.1 $\mu$ F 50V	マ イ ラ ー コ ン		
C205 ~208	UA 25 33:30	"	0.0033 $\mu$ F 50V	"		
C209 C210	FG 41 23:30	Ceramic Cap.	330pF 50V	セ ラ コ ン		
C211 C212	UA 25 51:00	Mylar Cap.	0.1 $\mu$ F 50V	マ イ ラ ー コ ン		
C213 C214	UA 25 41:00	"	0.01 $\mu$ F 50V	"		
C215 C216	UW 96 61:00	Electrolytic Cap.	1 $\mu$ F 50V	ケ ミ コ ン		
C217 C218	UW 93 73:30	"	33 $\mu$ F 16V	"		
C219 C220	UW 93 72:20	"	22 $\mu$ F 16V	"		
C221 C222	UW 94 71:00	"	10 $\mu$ F 25V	"		
C223	UW 96 71:00	"	10 $\mu$ F 50V	"		

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets		
C224	UW:96:61:00	Electrolytic Cap.	1 $\mu$ F 50V	ケ ミ コ ン				
C225	FH:21:22:20	Ceramic Cap.	220pF 500V	セ ラ コ ン				
C226	UW:94:71:00	Electrolytic Cap.	10 $\mu$ F 25V	ケ ミ コ ン				
C227	UW:93:74:70	"	47 $\mu$ F 16V	"				
C228	UW:93:81:00	"	100 $\mu$ F 16V	"				
C229	FG:41:34:70	Ceramic Cap.	0.0047 $\mu$ F 50V	セ ラ コ ン				
C230	UW:93:81:00	Electrolytic Cap.	100 $\mu$ F 16V	ケ ミ コ ン				
C231 C232	FG:44:41:00	Ceramic Cap.	0.01 $\mu$ F 50V	セ ラ コ ン				
C233	UW:93:81:00	Electrolytic Cap.	100 $\mu$ F 16V	ケ ミ コ ン				
C234	UW:93:73:30	"	33 $\mu$ F 16V	"				
C235 C236	UW:94:71:00	"	10 $\mu$ F 25V	"				
C237 C238	UW:96:61:00	"	1 $\mu$ F 50V	"				
C240	UW:93:81:00	"	100 $\mu$ F 16V	"				
C241	UA:25:41:00	Mylar Cap.	0.01 $\mu$ F 50V	マ イ ラ ー コ ン				
C242	UA:25:31:00	"	0.001 $\mu$ F 50V	"				
C243	UA:25:41:00	"	0.01 $\mu$ F 50V	"				
C244	UA:25:31:00	"	0.001 $\mu$ F 50V	"				
C245 ~248	UW:96:61:00	Electrolytic Cap.	1 $\mu$ F 50V	ケ ミ コ ン				
C249	UW:94:71:00	"	10 $\mu$ F 25V	"				
C250	UW:96:61:00	"	1 $\mu$ F 50V	"				
C251 C252	UW:96:63:30	"	3.3 $\mu$ F 50V	"				
C253 C254	UW:94:71:00	"	10 $\mu$ F 25V	"				
C255 C256	UW:96:71:00	"	10 $\mu$ F 50V	"				
C257	UW:94:71:00	"	10 $\mu$ F 25V	"				
C258	UW:93:73:30	"	33 $\mu$ F 16V	"				
C259 C260	FG:44:42:20	Ceramic Cap.	0.022 $\mu$ F 50V	セ ラ コ ン				
C262	UW:93:74:70	Electrolytic Cap.	47 $\mu$ F 16V	ケ ミ コ ン				
C263	UW:96:63:30	"	3.3 $\mu$ F 50V	"				
C264	FG:44:42:20	Ceramic Cap.	0.022 $\mu$ F 50V	セ ラ コ ン				
C265 C266	UW:96:61:00	Electrolytic Cap.	1 $\mu$ F 50V	ケ ミ コ ン				
C267 C268	UW:94:71:00	"	10 $\mu$ F 25V	"				
C271 C272	UW:94:71:00	"	10 $\mu$ F 25V	"				
C273 C274	UA:25:41:20	Mylar Cap.	0.012 $\mu$ F 50V	マ イ ラ ー コ ン				
* F1101 F1102	GE:20:04:40	Dolby Filter		ドルビーフィルター				
* L101 L102	GE:90:08:70	Trap Coil	105kHz	トラップコイル				
* L103 L104	GE:90:04:30	Coil	15mH	固定コイル				
L105 L106	GE:90:02:40	"	8.2mH	"				
L107 L108	GE:90:02:20	"	5.6mH	"				
R101 R102	HJ:35:71:00	Carbon Resistor	10k $\Omega$ RD25S	カーボン抵抗				
R103 R104	HJ:35:91:00	"	1M $\Omega$ "	"				
R105 R106	HJ:35:71:00	"	10k $\Omega$ "	"				
R107 R108	HJ:35:74:70	"	47k $\Omega$ "	"				
R109 R110	HJ:35:82:20	"	220k $\Omega$ "	"				
R111 R112	HJ:35:71:00	"	10k $\Omega$ "	"				
R113 R114	HJ:35:51:00	"	100 $\Omega$ "	"				
R115 R116	HJ:35:62:40	"	2.4k $\Omega$ "	"				
R117 R118	HJ:35:65:60	"	5.6k $\Omega$ "	"				
R119 R120	HJ:35:71:20	"	12k $\Omega$ "	"				
R121 ~124	HJ:35:73:30	"	33k $\Omega$ "	"				
R125 R126	HJ:35:61:00	"	1k $\Omega$ "	"				
R127 R128	HJ:35:63:90	"	3.9k $\Omega$ "	"				
R129 R130	HJ:35:65:10	"	5.1k $\Omega$ "	"				
R131 R132	HK:56:62:00	"	6.2k $\Omega$ "	"				

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets		
R 133 R 134	HK 56:81:10	Carbon Resistor	110k $\Omega$ RD25S	カ ー ボ ン 抵 抗				
R 135 R 136	HJ 35:65:10	"	5.1k $\Omega$ "	"				
R 137 R 138	HJ 35:78:20	"	82k $\Omega$ "	"				
R 139 R 140	HJ 35:64:30	"	4.3k $\Omega$ "	"				
R 141 R 142	HJ 35:91:00	"	1M $\Omega$ "	"				
R 143 R 144	HK 56:73:00	"	30k $\Omega$ "	"				
R 145 R 146	HJ 35:63:30	"	3.3k $\Omega$ "	"				
R 147 R 150	HJ 35:71:20	"	12k $\Omega$ "	"				
R 151 R 152	HJ 35:43:30	"	33 $\Omega$ "	"				
R 153 R 154	HJ 35:61:00	"	1k $\Omega$ "	"				
R 155 R 156	HJ 35:91:00	"	1M $\Omega$ "	"				
R 157 R 158	HJ 35:68:20	"	8.2k $\Omega$ "	"				
R 159 R 160	HJ 35:51:20	"	120 $\Omega$ "	"				
R 161 R 162	HJ 35:66:80	"	6.8k $\Omega$ "	"				
R163	HJ 35:52:20	"	220 $\Omega$ "	"				
R164	HL 31:54:70	Metal Oxide Film Resistor	470 $\Omega$ 1P	酸 金 抵 抗				
R165	HJ 35:64:70	Carbon Resistor	4.7k $\Omega$ RD25S	カ ー ボ ン 抵 抗				
R166	HJ 35:81:00	"	100k $\Omega$ "	"				
R 167 R 168	HJ 35:82:20	"	220k $\Omega$ "	"				
R 169 R 170	HJ 35:66:80	"	6.8k $\Omega$ "	"				
R 171 R 172	HJ 35:71:00	"	10k $\Omega$ "	"				
R 173 R 174	HJ 35:68:20	"	8.2k $\Omega$ "	"				
R 175 R 176	HJ 35:91:00	"	1M $\Omega$ "	"				
R 177 R 178	HJ 35:71:00	"	10k $\Omega$ "	"				
R 179 R 180	HJ 35:63:30	"	3.3k $\Omega$ "	"				
R 181 R 182	HJ 35:53:30	"	330 $\Omega$ "	"				
R 183 R 184	HJ 35:71:00	"	10k $\Omega$ "	"				
R 185 R 186	HJ 35:51:00	"	100 $\Omega$ "	"				
R 187 R 188	HJ 35:65:60	"	5.6k $\Omega$ "	"				
R189	HJ 35:63:30	"	3.3k $\Omega$ "	"				
R190	HJ 35:63:00	"	3k $\Omega$ "	"				
R191	HK 56:61:00	"	1k $\Omega$ "	"				
R192	HJ 35:56:80	"	680 $\Omega$ "	"				
R 193 R 196	HJ 35:71:00	"	10k $\Omega$ "	"				
R 197 R 198	HJ 35:74:70	"	47k $\Omega$ "	"				
R 199 R 200	HJ 35:81:20	"	120k $\Omega$ "	"				
R 201 R 202	HJ 35:74:70	"	47k $\Omega$ "	"				
R 203 R 204	HJ 35:73:30	"	33k $\Omega$ "	"				
R 205 R 206	HJ 35:71:00	"	10k $\Omega$ "	"				
R 207 R 208	HJ 35:74:70	"	47k $\Omega$ "	"				
R209	HJ 35:71:00	"	10k $\Omega$ "	"				
R210	HJ 35:73:30	"	33k $\Omega$ "	"				
R 211 R 212	HJ 35:44:70	"	47 $\Omega$ "	"				
R 213 R 214	HJ 35:71:20	"	12k $\Omega$ "	"				
R 215 R 216	HJ 35:74:70	"	47k $\Omega$ "	"				
R 217 R 218	HJ 35:42:20	"	22 $\Omega$ "	"				
R 219 R 220	HJ 35:81:00	"	100k $\Omega$ "	"				
R 221 R 222	HJ 35:42:20	"	22 $\Omega$ "	"				
R 223 R 224	HJ 35:74:70	"	47k $\Omega$ "	"				
R 225 R 226	HJ 35:71:00	"	10k $\Omega$ "	"				
R 227 R 228	HJ 35:63:90	"	3.9k $\Omega$ "	"				
R 229 R 230	HJ 35:81:00	"	100k $\Omega$ "	"				
R 231 R 232	HJ 35:71:00	"	10k $\Omega$ "	"				
R 233 R 234	HJ 35:73:30	"	33k $\Omega$ "	"				

※ New Parts (新規部品)



Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets			
R235 R236	HJ 35:51:00	Carbon Resistor	100Ω RS25S	カーボン抵抗					
R237 R238	HJ 35:81:00	"	100kΩ "	"					
R239 ~242	HJ 35:74:70	"	47kΩ "	"					
R243 R244	HJ 35:65:60	"	5.6kΩ "	"					
R245 R246	HJ 35:61:20	"	1.2kΩ "	"					
R247 R248	HJ 35:62:20	"	2.2kΩ "	"					
R249 R250	HJ 35:64:70	"	4.7kΩ "	"					
R251 R252	HJ 35:63:30	"	3.3kΩ "	"					
R253 R254	HJ 35:74:70	"	47kΩ "	"					
R255 R256	HJ 35:72:70	"	27kΩ "	"					
R257 R258	HJ 35:54:70	"	470Ω "	"					
R259 R260	HJ 35:71:30	"	13kΩ "	"					
R261 R262	HJ 35:82:20	"	220kΩ "	"					
R263 R264	HJ 35:53:30	"	330Ω "	"					
R265 R266	HJ 35:68:20	"	8.2kΩ "	"					
R267 R268	HJ 35:52:70	"	270Ω "	"					
R269 ~272	HJ 35:64:70	"	4.7kΩ "	"					
R273 R274	HJ 35:68:20	"	8.2kΩ "	"					
R275 R276	HJ 35:64:70	"	4.7kΩ "	"					
R277	HJ 35:52:20	"	220Ω "	"					
R278	HJ 35:71:00	"	10kΩ "	"					
R279 R280	HJ 35:64:70	"	4.7kΩ "	"					
R281 R282	HJ 35:61:50	"	1.5kΩ "	"					
R283 R284	HJ 35:62:20	"	2.2kΩ "	"					
R285 R286	HJ 35:59:10	"	910Ω "	"					
R287 ~290	HJ 35:64:70	"	4.7kΩ "	"					
R291 R292	HJ 35:62:20	"	2.2kΩ "	"					
R293 ~296	HJ 35:53:90	"	390Ω "	"					
R297 R298	HJ 35:41:00	"	10Ω "	"					
R299 R300	HJ 35:51:50	"	150Ω "	"					
R301 R302	HJ 35:65:60	"	5.6kΩ "	"					
R303 R304	HJ 35:61:00	"	1kΩ "	"					
R305 R306	HJ 35:81:00	"	100kΩ "	"					
R307 R308	HJ 35:61:00	"	1kΩ "	"					
R309 R310	HJ 35:71:00	"	10kΩ "	"					
R311 R312	HJ 35:61:00	"	1kΩ "	"					
R313 R314	HJ 35:81:00	"	100kΩ "	"					
R315 R316	HJ 35:61:00	"	1kΩ "	"					
R317 R318	HZ 00:22:80	Carbon Composition Resistor	22MΩ	ソリッド抵抗					
R319 ~324	HJ 35:81:00	Carbon Resistor	100kΩ RD25S	カーボン抵抗					
R325 R326	HJ 35:73:30	"	33kΩ "	"					
R327 R328	HK 56:79:10	"	91kΩ "	"					
R329 R330	HJ 35:64:70	"	4.7kΩ "	"					
R331 R332	HJ 35:73:30	"	33kΩ "	"					
R333 R334	HJ 35:66:80	"	6.8kΩ "	"					
R335 R336	HJ 35:51:00	"	100Ω "	"					
R337 R338	HJ 35:64:70	"	4.7kΩ "	"					
R339 R340	HJ 35:63:30	"	3.3kΩ "	"					
R341 R342	HJ 35:73:30	"	33kΩ "	"					
R343 R344	HJ 35:42:20	"	22Ω "	"					
R345 R346	HJ 35:71:20	"	12kΩ "	"					
R347 R348	HJ 35:81:80	"	180kΩ "	"					

\* New Parts (新規部品)



Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets		
R 349 R 350	HJ 35:91:20	Carbon Resistor	1.2M $\Omega$ RD25S	カーボン抵抗				
R 351 R 352	HK 35:36:80	"	6.8 $\Omega$ "	"				
R 353 R 354	HJ 35:61:00	"	1k $\Omega$ "	"				
R355	HJ 35:91:00	"	1M $\Omega$ "	"				
R356	HJ 35:71:00	"	10k $\Omega$ "	"				
R 357 R 358	HJ 35:66:80	"	6.8k $\Omega$ "	"				
R 359 R 360	HJ 35:81:20	"	120k $\Omega$ "	"				
R361	HJ 35:61:00	"	1k $\Omega$ "	"				
R362	HJ 35:71:00	"	10k $\Omega$ "	"				
R 363 R 364	HJ 35:71:20	"	12k $\Omega$ "	"				
R 365 R 366	HJ 35:68:20	"	8.2k $\Omega$ "	"				
R 367 R 368	HK 56:64:70	"	4.7k $\Omega$ "	"				
R 369 R 370	HJ 35:72:70	"	27k $\Omega$ "	"				
R 371 R 372	HJ 35:74:70	"	47k $\Omega$ "	"				
R 373 R 374	HJ 35:68:20	"	8.2k $\Omega$ "	"				
R 375 R 376	HJ 35:71:50	"	15k $\Omega$ "	"				
R 377 R 378	HJ 35:72:20	"	22k $\Omega$ "	"				
R 379 R 380	HJ 35:61:20	"	1.2k $\Omega$ "	"				
R 381 R 382	HJ 35:64:70	"	4.7k $\Omega$ "	"				
R 383 R 384	HJ 35:71:00	"	10k $\Omega$ "	"				
R 385 R 386	HJ 35:81:00	"	100k $\Omega$ "	"				
R 387 R 388	HJ 35:54:70	"	470 $\Omega$ "	"				
R 389 R 390	HJ 35:71:00	"	10k $\Omega$ "	"				
R 391 R 392	HJ 35:53:30	"	330 $\Omega$ "	"				
R 393 R 394	HJ 35:62:20	"	2.2k $\Omega$ "	"				
R395	HJ 35:64:70	"	4.7k $\Omega$ "	"				
R396	HJ 35:62:20	"	2.2k $\Omega$ "	"				
R 397 R 398	HJ 35:64:70	"	4.7k $\Omega$ "	"				
R 399 R 400	HU 07:63:30	Matal Film Resistor	3.3k $\Omega$ RE35	金属披膜抵抗				
R 401 ~403	HJ 35:66:80	Carbon Resistor	6.8k $\Omega$ RD25S	カーボン抵抗				
R404	HJ 35:71:00	"	10k $\Omega$ "	"				
R405	HJ 35:52:20	"	220 $\Omega$ "	"				
R406	HJ 35:53:90	"	390 $\Omega$ "	"				
R407	HJ 35:52:20	"	220 $\Omega$ "	"				
R408	HJ 35:53:90	"	390 $\Omega$ "	"				
R409	HJ 35:71:20	"	12k $\Omega$ "	"				
R410	HJ 35:52:20	"	220 $\Omega$ "	"				
R411	HJ 35:64:70	"	4.7k $\Omega$ "	"				
R412	HJ 35:91:00	"	1M $\Omega$ "	"				
R 413 R 414	HJ 35:71:00	"	10k $\Omega$ "	"				
R415	HJ 35:81:00	"	100k $\Omega$ "	"				
R416	HJ 35:71:00	"	10k $\Omega$ "	"				
R417	HJ 35:81:00	"	100k $\Omega$ "	"				
R 418 ~420	HJ 35:71:00	"	10k $\Omega$ "	"				
R421	HJ 35:61:00	"	1k $\Omega$ "	"				
R 422 ~424	HJ 35:71:00	"	10k $\Omega$ "	"				
R425	HJ 35:61:00	"	1k $\Omega$ "	"				
R426	HJ 35:71:00	"	10k $\Omega$ "	"				
R427	HJ 35:55:60	"	560 $\Omega$ "	"				
R 428 R 429	HJ 35:71:00	"	10k $\Omega$ "	"				
R430	HJ 35:66:80	"	6.8k $\Omega$ "	"				
R 431 R 432	HJ 35:74:70	"	47k $\Omega$ "	"				
R 433 R 434	HJ 35:71:50	"	15k $\Omega$ "	"				

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets		
R435 R436	HJ 35:91:00	Carbon Resistor	1M $\Omega$ RD25S	カーボン抵抗				
R437 R438	HJ 35:61:20	"	1.2k $\Omega$ "	"				
R439 R440	HJ 35:82:20	"	220k $\Omega$ "	"				
R443	HJ 35:81:00	"	100k $\Omega$ "	"				
R444	HJ 35:83:30	"	330k $\Omega$ "	"				
R445 R446	HJ 35:71:00	"	10k $\Omega$ "	"				
R448	HJ 35:64:70	"	4.7k $\Omega$ "	"				
R449 R450	HJ 35:81:00	"	100k $\Omega$ "	"				
* VR101	HQ 40:01:90	Slide variable Resistor	A50k $\Omega$ x 2	スライドVR	REC LEVEL			
* VR102	HS 41:16:80	Variable Resistor	100k $\Omega$ CC	可変抵抗器	BALANCE			
* VR103	HS 41:17:10	"	B10k $\Omega$ CC, CT	"	BIAS			
* VR104	HS 41:17:00	"	A50k $\Omega$ x 2	"	PHONES LEVEL			
VR105	HT 37:00:40	Semi Variable Resistor	B500 $\Omega$	半固定抵抗				
VR106	HT 37:00:10	"	B1k $\Omega$	"				
VR107 ~114	HT 37:00:20	"	B10k $\Omega$	"				
VR115 VR116	HT 37:01:00	"	B50k $\Omega$	"				
VR117 VR118	HT 37:00:70	"	B3k $\Omega$	"				
VR119 ~123	HT 37:00:60	"	B2k $\Omega$	"				
VR124	HT 37:00:50	"	B5k $\Omega$	"				
VR125	HT 37:00:20	"	B10k $\Omega$	"				
VR126 VR127	HT 37:00:60	"	B2k $\Omega$	"				
TR101 TR102	iD 06:55:00	Transistor	2SD665 (D,E,F)	トランジスタ	Inter-changeable			
* "	iD 10:12:00	"	2SD1012 (G,H)	"				
TR103 ~106	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable			
* "	iC 26:34:00	"	2SC2634 (R,S,T)	"				
TR107 TR108	iC 28:78:00	"	2SC2878	"	Inter-changeable			
* TR109 TR110	iC 23:20:10	"	2SC2320 (E,F)	"				
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				
TR111 ~114	iE 10:05:00	FET	2SK68A (K,L,M,N)	F E T	Inter-changeable			
* TR115 ~120	iC 23:20:10	Transistor	2SC2320 (E,F)	トランジスタ				
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				
TR121 ~124	iC 28:78:00	"	2SC2878	"	Inter-changeable			
* TR125 ~127	iC 23:20:10	"	2SC2320 (E,F)	"				
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				
TR129 ~138	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable			
* "	iC 26:34:00	"	2SC2634 (R,S,T)	"				
TR139 TR140	iC 28:78:00	"	2SC2878	"	Inter-changeable			
* TR141 TR142	iD 06:55:00	"	2SD655 (D,E,F)	"				
"	iD 10:12:00	"	2SD1012 (G,H)	"				
TR143 ~148	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable			
* "	iC 26:34:00	"	2SC2634 (R,S,T)	"				
TR149 TR150	iC 28:78:00	"	2SC2878	"	Inter-changeable			
* TR151 ~157	iC 23:20:10	"	2SC2320 (E,F)	"				
"	iC 26:34:00	"	2SC2634 (R,S,T)	"				

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets		
* TR158	iD 11 53:00	Transistor	2SD1153	ト ラ ン ジ ス タ				
TR159 TR160	iC 23 20:10	"	2SC2320 (E,F)	"	Inter-changeable			
"	iC 26 34:00	"	2SC2634 (R,S,T)	"				
* TR161	iD 03 13:00	"	2SD313 (E,F)	"				
TR162 ~ 165	iA 09 99:10	"	2SA999 (E,F)	"	Inter-changeable			
"	iA 11 27:00	"	2SA1127 (R,S,T)	"				
TR166 ~ 168	iC 23 20:10	"	2SC2320 (E,F)	"	Inter-changeable			
"	iC 26 34:00	"	2SC2634 (R,S,T)	"				
TR169 ~ 172	iA 09 99:10	"	2SA999 (E,F)	"	Inter-changeable			
"	iA 11 27:00	"	2SA1127 (R,S,T)	"				
TR173 ~ 179	iC 23 20:10	"	2SC2320 (E,F)	"	Inter-changeable			
"	iC 26 34:00	"	2SC2634 (R,S,T)	"				
D101 ~ 103	iF 00 00:40	Diode	IS1555	ダ イ オ ー ド	Inter-changeable			
"	iF 00 06:70	"	IS2473	"				
D105 ~ 150	iF 00 00:40	"	IS1555	"	Inter-changeable			
"	iF 00 06:70	"	IS2473	"				
D151	iF 00 15:10	Zener Diode	HZ-6CIL	ツェナーダイオード				
D152 ~ 155	iF 00 00:40	Diode	IS1555	ダ イ オ ー ド	Inter-changeable			
"	iF 00 06:70	"	IS2473	"				
* IC10	iG 07 69:00	IC	NJM2041S	I C				
* IC102 ~ 104	iG 07 68:00	"	NJM4558S	"				
* IC105 IC106	iG 06 23:00	"	μPC1180C	"				
* IC107 IC108	iG 06 25:00	"	μPC1252H2	"				
* IC109 IC110	iG 06 24:00	"	μPC1253H2	"				
* IC111	iG 07 68:00	"	NJM4558S	"				
* IC112	iG 07 74:00	"	NJM4556S	"				
* IC113	iG 03 49:00	"	M5214L	"				
* IC114	iG 07 68:00	"	NJM4558S	"				
* IC115	iG 08 98:00	"	BIAS OSC	"				
* IC116	iG 07 49:00	"	BA6138	"				
* IC117	iG 07 74:00	"	NJM4556S	"				
* IC118 IC119	iG 07 68:00	"	NJM4558S	"				
* IC120	iG 03 49:00	"	M5214L	"				
SW101	KA 80 28:30	Push Switch	4-2	プッシュスイッチ	MONITOR			
* SW102	KA 80 31:60	"	6-2x2	3連プッシュスイッチ	NOISE REDUCTION			
SW103	KA 80 28:30	"	4-2	プッシュスイッチ	TEST			
RY101	KC 00 12:90	Relay	HB 24V	リ レ ー				
* JK101	LB 30 16:80	Phone Jack	HLJ0520 WH	ホ ー ン ジャ ッ ク	Silver			
* "	LB 30 16:90	"	" BL	"	Black			
* PJ101	LB 40 10:30	Pin Jack	4P	ピ ン ジャ ッ ク				
	LB 20 13:90	2.5 Pitch Base Pin	TEB2P-SHF	2.5ピッチベースピン				
	LB 40 05:70	"	TEB4P-SHF	"				
	LB 91 20:50	Short Plug	5P i-Type	シ ョ ー ト プ ラ グ				
	LB 91 21:00	"	10P i-Type	"				
	BB 06 62:90	Ground Washer		ア ー ス ワ ッ シ ャ ー				

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
	NA:08:01:40	Counter Circuit Board	カウンタースイッチ			J,R,A,G,B
	NA:08:02:00	"	"			U,C
C601 C602	UW:94:64:70	Electrolytic Cap.	4.7 $\mu$ F 25V	ケ ミ コ ン		
C603 ~605	FG:44:41:00	Ceramic Cap.	0.01 $\mu$ F 50V	セ ラ コ ン		
C606	UW:64:64:70	Electrolytic Cap.	4.7 $\mu$ F 25V	ケ ミ コ ン		
C607	UW:91:82:20	"	220 $\mu$ F 6.3V	"		
C608 C609	UW:93:71:00	"	10 $\mu$ F 16V	"		
C610	UA:25:51:00	Mylar Cap.	0.1 $\mu$ F 50V	マ イ ラ ー コ ン		
C611	FG:44:41:00	Ceramic Cap.	0.01 $\mu$ F 50V	セ ラ コ ン		
R601	HJ:35:54:70	Carbon Resistor	470 $\Omega$ RD25S	カ ー ボ ン 抵 抗		
R602 ~604	HJ:35:56:80	"	680 $\Omega$ "	"		
R605 R606	HJ:35:54:70	"	470 $\Omega$ "	"		
R607 R608	HJ:35:65:60	"	5.6k $\Omega$ "	"		
R609 R610	HJ:35:61:50	"	1.5k $\Omega$ "	"		
R611 R612	HJ:35:71:20	"	12k $\Omega$ "	"		
R613 R614	HJ:35:55:60	"	560 $\Omega$ "	"		
R615 R616	HJ:35:91:00	"	1M $\Omega$ "	"		
R617 R618	HJ:35:72:20	"	22k $\Omega$ "	"		
R619 R620	HJ:35:75:60	"	56k $\Omega$ "	"		
R621 ~624	HJ:35:71:00	"	10k $\Omega$ "	"		
R625	HJ:35:64:70	"	4.7k $\Omega$ "	"		
R626 ~630	HJ:35:71:00	"	10k $\Omega$ "	"		
R631 R632	HJ:35:54:70	"	470 $\Omega$ "	"		
R633 ~636	HJ:35:74:70	"	47k $\Omega$ "	"		
R637	HJ:35:66:80	"	6.8k $\Omega$ "	"		
R638	HJ:35:71:00	"	10k $\Omega$ "	"		
R639	HJ:35:74:70	"	47k $\Omega$ "	"		
R640	HJ:35:52:20	"	220 $\Omega$ "	"		
R641 ~644	HJ:35:61:50	"	1.5k $\Omega$ "	"		
R645 R646	HJ:35:64:70	"	4.7k $\Omega$ "	"		
R647 ~649	HJ:35:52:20	"	220 $\Omega$ "	"		
R650 ~656	HJ:35:48:20	"	82 $\Omega$ "	"		
R657	HJ:35:71:20	"	12k $\Omega$ "	"		
R658	HJ:35:56:80	"	680 $\Omega$ "	"		
R659	HJ:35:71:20	"	12k $\Omega$ "	"		
R660	HJ:35:56:80	"	680 $\Omega$ "	"		
R661	HJ:35:71:20	"	12k $\Omega$ "	"		
R662	HJ:35:64:70	"	4.7k $\Omega$ "	"		
R663	HJ:35:52:20	"	220 $\Omega$ "	"		
R664	HJ:35:72:20	"	22k $\Omega$ "	"		
R665	HJ:35:81:00	"	100k $\Omega$ "	"		
R666	HJ:35:74:70	"	47k $\Omega$ "	"		
R667	HJ:35:43:30	"	33 $\Omega$ "	"		
R668	HJ:35:71:20	"	12k $\Omega$ "	"		
R669 ~672	HJ:35:61:50	"	1.5k $\Omega$ "	"		
R673 ~687	HJ:35:45:60	"	56 $\Omega$ "	"		
R688	HJ:35:64:70	"	4.7k $\Omega$ "	"		
R689	HJ:35:72:20	"	27k $\Omega$ "	"		
R690 ~694	HJ:35:71:00	"	10k $\Omega$ "	"		
TR601 ~605	iC:23:20:10	Transistor	2SC2320 (E,F)	ト ラ ン ジ ス タ	Inter-changeable	
"	iC:26:34:00	"	2SC2634 (R,S,T)	"		

\* New Parts (新規部品)



Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets			
TR606 TR607	iA 09:99:10	Transistor	2SA999 (E,F)	トランジスタ	Inter-changeable				
"	iA 11:27:00	"	2SA1127(R,S,T)	"					
* TR608 ~611	iB 05:98:00	"	2SB598 (E,F)	"					
TR612	iC 26:34:00	"	2SC2634 (R,S,T)	"					
TR613	iA 09:99:10	"	2SA999 (E,F)	"	Inter-changeable				
"	iA 11:27:00	"	2SA1127 (R,S,T)	"					
TR614	iC 23:20:10	"	2SC2320 (E,F)	"	Inter-changeable				
"	iC 26:34:00	"	2SC2634 (R,S,T)	"					
* TR615 ~618	iB 05:98:00	"	2SB598 (E,F)	"					
D601 ~608	iF 00:00:40	Diode	IS1555	ダイオード	Inter-changeable				
"	iF 00:06:70	"	IS2473	"					
* IC601	iG 07:51:00	IC	LA6402A-108	I C					
* IC602	iG 07:52:00	"	MSL9350RS	"					
* AA:61:35:70		Holder, C. Board		基板ホルダー					
CB:60:56:20		Plastic Rivet		プラスチックリベット					
* NA:08:01:60		Operation Circuit Board		オペレーションシート					
D701 D702	iF 00:23:70	LED	SLR-34GC GR	L E D					
D703	iF 00:23:80	"	SLR-34URC RE	"					
D704	iF 00:23:70	"	SLR-34GC GR	"					
D705	iF 00:23:80	"	SLR-34URC RE	"					
SW701 ~708	KA:90:30:10	Switch		タクトスイッチ					
CB:60:56:20		Plastic Rivet		プラスチックリベット					
* CB:61:36:50		Holder		ホルダー					
* NA:07:87:50		Relay Circuit Board		中継シート					
C901	UK:13:72:20	Electrolytic Cap.	22 $\mu$ F 16V	B P コ ン					
R901 ~903	HJ 35:54:70	Carbon Resistor	470 $\Omega$ RD25S	カーボン抵抗					
D901 D902	iH 00:05:90	Diode	10E-1	ダイオード					
* TR901 TR902	iK 00:03:80	Photo Reflector	NJL5141EA	フォトリフレクター					
SW901 ~903	KA:60:04:70	Switch	MSW-S209CU	スケルトンスイッチ					
LB:91:10:30		Short Plug	3P L-Type	ショートプラグ					
LB:91:10:40		"	4P L-Type	"					
* LB:91:10:80		"	8P L-Type	"					
* CB:60:95:10		Holder		ファイバーホルダー					

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名		Remarks	Common Model	Markets		
* JC	00:08:10	D.D Motor	MC-950G		D . D モ ー タ ー				
C1	UW:96:54:70	Electrolytic Cap.	0.47 $\mu$ F	50V	ケ ミ コ ン				
C2	UW:86:61:00	"	1 $\mu$ F	50V	"				
C3	UW:96:54:70	"	0.47 $\mu$ F	50V	"				
C4	UW:83:73:30	"	33 $\mu$ F	16V	"				
C5	FD:21:24:70	Polystyrene Film Cap.	470pF		ス チ コ ン				
C6	FD:15:34:70	"	0.0047 $\mu$ F		"				
C7	FT:17:42:20	Polypropylene Film Cap.	0.022 $\mu$ F		ポリプロピレンフィルムコン				
C8	FD:15:42:20	Polystyrene Film Cap.	0.022 $\mu$ F		ス チ コ ン				
C9 C10	FD:15:42:20	Polystyrene Film Cap.	0.022 $\mu$ F		ス チ コ ン				
C11	FH:61:21:50	Ceramic Cap.	150pF		セ ラ コ ン				
C12	FG:74:42:20	"	0.022 $\mu$ F		"				
C13	UW:96:54:70	Electrolytic Cap.	0.47 $\mu$ F	50V	ケ ミ コ ン				
R1	HK:15:32:70	Carbon Resistor	2.7 $\Omega$	FCR25	カ ー ボ ン 抵 抗				
R2	HJ:35:51:80	"	180 $\Omega$	RD25	"				
R3	HJ:35:63:30	"	3.3k $\Omega$	"	"				
R4	HJ:35:51:00	"	100 $\Omega$	"	"				
R6	HJ:35:53:30	"	330 $\Omega$	"	"				
R7	HJ:35:73:30	"	33k $\Omega$	"	"				
R8	HJ:35:51:80	"	180 $\Omega$	"	"				
R10	HJ:35:62:20	"	2.2k $\Omega$	"	"				
R11	HJ:35:81:80	"	180k $\Omega$	"	"				
R12	HJ:35:83:30	"	330k $\Omega$	"	"				
R13	HJ:35:81:00	"	100k $\Omega$	"	"				
R14	HJ:35:64:70	"	4.7k $\Omega$	"	"				
R15	HJ:35:66:80	"	6.8k $\Omega$	"	"				
R16	HJ:35:91:00	"	1M $\Omega$	"	"				
R17	HJ:35:86:80	"	680k $\Omega$	"	"				
R18	HJ:35:71:00	"	10k $\Omega$	"	"				
R19	HJ:35:61:20	"	1.2k $\Omega$	"	"				
R20	HU:57:78:20	Metal Film Resistor	82k $\Omega$		金 属 被 膜 抵 抗				
R30 R31	HJ:35:61:00	Carbon Resistor	1k $\Omega$	RD25S	カ ー ボ ン 抵 抗				
R32	HJ:35:61:80	"	6.8k $\Omega$	"	"				
R33	HJ:35:71:50	"	15k $\Omega$	"	"				
R34	HJ:35:84:70	"	470k $\Omega$	"	"				
VR1	HT:41:01:40	Variable Resistor	47k $\Omega$		半 固 定 抵 抗				
TR1 TR2	iX:60:06:80	Transistor	2SA952	(K,L)	ト ラ ン ジ ス タ				
TR3 TR4	iC:99:01:50	"	2SC2001	(K,L)	"				
TR5 TR6	iC:09:45:00	"	2SC945	(P,Q)	"				
TR7 TR8	iA:07:33:50	"	2SA733	(P,Q)	"				
TR9	iA:07:33:50	"	2SA733	(P,K)	"				
TR10	iC:09:45:90	"	2SC945	(P,K)	"				
TR11	iA:07:33:50	"	2SA733	(P,K)	"				
D1 ~4	iF:99:04:00	Diode	1SS53		ダ イ オ ード				
IC1	iX:60:04:80	IC	VC1209		I C				

\* New Parts (新規部品)